

Attachment 9

Central Midlands Area

December 2006 EAC Progress Reports



A. Control Measure under Consideration	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
Central Midlands, SC (Designated - Attainment)							
<p align="center">DECEMBER 2006 FAIRFIELD COUNTY</p> <p align="center">Based on stakeholder consultation and taking into consideration resource and political constraints, the following emission reduction strategies remain under consideration. The County will continue to evaluate the air quality within the county and may implement one or more of the following measures under consideration.</p>							
Air Quality Contact	Ronald Stowers, Fairfield County Director of Planning, Building and Zoning Department is designated as the Air Quality Contact. At a minimum, this contact will be responsible for ozone education/outreach and dissemination of ozone forecast.	Ron Stowers was designated as the County Air Quality Contact.	Mar-03	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Support state-wide efforts	Fairfield County will support the efforts of SC DHEC regarding state-wide emission reduction strategies.	The County supported the efforts of SCDHEC in regards to the promulgation of the following regulations: SC61-62.2 Prohibition of Open Burning and SC61-62.5 Std. 5.2 Control of Oxides of Nitrogen.	June, 2004	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Amendment of the Fairfield County Zoning Ordinance	Amend the Fairfield County Zoning Ordinance, Article IV, Conditional Uses, Section 4-9, Manufacturing Uses to add prescriptive requirements for reducing/or maintaining ozone levels.	Completed	June, 2005	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Amendment of the Fairfield County Zoning Ordinance	Evaluate the Fairfield County Zoning Ordinance, Article VI, Screening, Landscaping and Common Space Regulations determine adequacy of tree planting/landscaping standards to help promote strategic tree planting	Completed	June, 2005	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Amendment of the Fairfield County Zoning Ordinance	Amend the Fairfield County Zoning Ordinance, Article 3 to promote Planned Development Districts that would encourage land use planning that will help improve air quality.	Completed	June, 2005	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Awareness	Work with and provide information to the Incorporated areas of Fairfield County on Land Use Planning measures that will help improve air quality.	Completed	June, 2005	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Awareness	Promote ozone education/awareness by distribution of information, including ozone alerts to County employees as well as to the Town of Winnsboro and Town of Ridgeway. Information to be provided information as regards to specific events such as Earthday and EAC Summits. Information on grant availability for ozone reduction will also be provided.	Provided information provided including proclamation and education brochures and pamphlets by SCDHEC on grants available concerning Earth Day on April 22, 2006 to Public and county employees.	April, 2006	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Web Site	County set up web site that will include ozone awareness information including ozone numbers as provided by SCDHEC.	County does not have a current website except for Economic Development. County is deciding whether to try to include information on Economic Development website or whether it is feasible for County to set new website.	June, 2007	n/a directionally sound	n/a directionally sound	n/a	
Operation and Maintenance Activities	Work with County Public Works to develop strategies to reduce activities that would effect ozone levels during Ozone Action Days	Provided Public Works information on available grant from US Dept of vEnergy's Clean Cities funding for alternative fuels.	May 2, 2006	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
<p>Comments:</p> <p>1. December 2004 - SC EAC SIP - activity not quantified for several reasons (first) in accordance with EAC Protocol, after all adopted Federal and State controls were accounted for in the modeling, it was determined that local controls were not necessary to demonstrate attainment of the 8-hour ozone standard. Measures were submitted by the local areas to show their continued support and commitment to the EAC process. (second) this activity is directionally sound and should provide air quality benefits and in some cases measurable results. The progress toward implementing this activity and the benefits derived will be documented as a part of the ongoing reporting requirements.</p> <p>2. December 2003 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac.html - additional information provided by the county to include "findings", "advantages/disadvantages", "recommendations", "costs", etc...</p> <p>3. March 2004 - Local Early Action Plan - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0304.asp</p> <p>4. June 2004 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0604.asp</p> <p>5. December 2004 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_1204.asp</p> <p>6. December 2004 - SC EAC SIP - Including Appendix 8 (Local Early Action Plans and the Air Quality Awareness and Improvement Policy) and Appendix 16 (County Level Emission Reductions and Descriptions for the Ozone EAC Areas) - See - http://www.scdhec.gov/eqc/baq/html/eap_sip.html</p> <p>7. April 20, 2005 - Correspondence to Mr. Palmer including clarifying supplemental information to the EAC SIP submittal of December 2004. - See - http://www.scdhec.gov/eqc/baq/html/eap_sip.html</p> <p>8. June 2005 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0605.asp</p>							

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11 South Carolina State Measures							
Comments: Modeling for 2007, shows attainment without including measures beyond national and regional measures already finalized.. 2012 and 2017 also shows attainment.							
11 Central Midlands, SC (Effective date of non-attainment designation deferred) - Lexington County							
Conversion of Commercial Vehicle Fleet to Propane	Schwan's Home Service, Inc. will convert 11 heavy duty gasoline fuel trucks to propane.	completed	2005	1,300 lbs/year	1,638 lbs/year	N/A	CO reductions 8,244 lbs/year December 2004 EAC SIP - Appendix 16 See Comment 6
Develop Air Quality Website	Develop a web page that is dedicated to posting information on air quality as well as highlight Ozone Action Days. This website will also have links to state and federal air quality web sites.	Lexington County's Public Works Department website was launched in the summer of 2006. On the Public Works site is information about ground level ozone and the Early Action Compact. A request to update the website to include fall air quality tips, a fall air quality flash animation and links to federal and state websites was put into the County's IS Department on October 18, 2006. The request has yet to be filled.	Summer 2006	38.16 tons/season N/A	8.03 tons/season 183.5 tons/yr	N/A	
Support SCDHEC's statewide efforts to reduce ozone levels.	1. Stakeholder group to support and participate in modeling efforts. 2. Develop stakeholder group to participate in development of regulations (NOx - BACT (Best Available Control Technology Economically Achievable), restrict open burning).	December 2004 EAC SIP did include Appendix 16 - 1. SC61-62.2 "Prohibition of Open Burning" regulation with reductions for 2007 calendar year - reductions expected during the ozone season for residential construction waste. 2. SC61-62.5, Std. 5.2 "Control of Oxides of Nitrogen" reduction amount for both existing and new sources combined across Lexington and Richland counties for 2007 calendar year	1. June 25, 2004 2. June 25, 2004	N/A	N/A	N/A	See Comment #2
Lexington County Fleet Management	1. 12 alternative fuel vehicles in fleet. Four additional vehicles (three trucks and on car) are scheduled for purchase. 2. Tri-axes are equipped with Engine Control Software to monitor vehicle usage. Idle time is set for 5 min and then automatic shut off. 3. The caterpillar engines being purchase have the ACERT Technology. 4. The County purchased 35 Impalas (more efficient) instead of Crown Vic for the sheriff department. Proposing 35 more for the next year. 5. VDO system on County vehicles monitors driving habits. 6. Fleet are maintained 3 month or 5,000 miles, if not maintained the fuel dispensers will not work for the vehicle.	1. The County is currently trying to purchase 4 additional flex fuel vehicles. This purchase must first be approved by County Council at their December meeting. 3. Caterpillar engines that are purchased for County are meeting the air quality standards proposed for 2007.	3. 2005-2007 4. 35 more were ordered in October 2005	Directionally sound	Directionally sound	N/A	(http://www.centralsouthmidlands.org/)
Land use/Green Space	A planning study (2005-2006) by COATS (Columbia Area Transportation Study) for bicycle and pedestrian facilities in the Central Midlands regions (Lexington, Richland, Kershaw, and Calhoun Counties) as a viable modal choice. (simmons@centralsouthmidlands.org)	Public Meeting held Nov. 14, 2005 Final Report issued March 2006 o The final report of this study was released in March 2006 and included Early Action Projects for the construction of bicycle and pedestrian facilities. They include: o Establishing a bike route on Center Street in West Columbia o Construct sidewalks on both sides of August Road (US 1) in Lexington County o Kick off a new neighborhood sidewalk program in the Town of Lexington o Add sidewalks on both sides of Columbiana Drive in Irmo o Improve pedestrian crossings at the intersection of North Main Street (US 1) and Columbiana Avenue (US 378) in the Town of Lexington o Provide sidewalks on both sides of Sunset Boulevard (US 378) on the east side of the Town of Lexington	Final Report March 2006	Directionally sound	Directionally sound	N/A	
Land-Use Improvement Action	1. The Town of Lexington passed through Town Council a request for two streets in The Town be designated as one-way streets to ease traffic congestion. 2. The new Stormwater Management Ordinance and Design Manual currently under design for the County's Phase II NPDES permit is to include open space requirements which include lowering impervious area amounts and keeping natural vegetation. 3. Lexington County Council approves encouraging Low Impact Development in the County, which emphasizes decreasing impervious areas, leaving trees and other vegetation.	1. Butler and Main streets to be constructed as one-way.	1. Town Council passed at the Nov. 2005 meeting 2. September 1, 2007 deadline for implementation. 3. April 28, 2006 Town Council approved fee cuts for first three LID developments.	Directionally sound	Directionally sound	N/A	See Comment #2
Green Power Support	MCEC (Mid-Carolina Electric Cooperative) offers the purchase of green power blocks. This power is distributed by Santee Cooper and blocks are currently being purchased by local commercial and residential stewards of the environment. State-wide there are 1300 residential co-op participants. (www.santeecooper.com/greenpower) One block is equal to 100 kilowatt hours of electricity for residential customers and 200 kilowatt hours of electricity for commercial customers.	Local businesses supporting are Lowe's, BB&T, Kinko, Wachovia Banks. There are 115 residential Green Blocks Customers purchasing 164 blocks of green power. There are an average of 82 blocks of green power purchased by commercial customers.	Signing up for Green Power is a voluntary open enrollment process through MCEC.	Directionally sound	Directionally sound	N/A	
Energy Efficiency of New/Renovation of County Buildings	All windows in the County Administration Building were replaced with energy efficient windows. The same windows were used in the new Courthouse also.	2003-2004	completed 2003-2004	Directionally sound	Directionally sound	N/A	Additional information submitted in December 2004 Progress Report See Comment #5
Grant/Fund Proposals	1. Lexington County/Richland County applied for grant for Gas Cap Replacement/Gas Cap Wrenches. 2. Research other grant opportunities to fund future projects.	1. Did not receive the grant. 2. Meeting scheduled with the grants librarian at the South Carolina State Library to learn more about researching and preparing grant proposals.	2. June 20, 2006	Directionally sound	Directionally sound	N/A	Additional information submitted in June 2004 Progress Report See Comment #4
Stakeholders Meetings	1. June 6, 2005, meet with David Farren, Southern Environmental Law Center (SELC) and elected official from Lexington And Richland County to discuss "non-attainment" and goals to meet standards for ground level ozone. They also informed us of the release of the Columbia area air quality report by SELC. 2. Meeting with major industries to discuss the ozone situation held on July 18, 2006. 3. Talk with Lexington Soil and Water Conservation District to partner with us for air quality issues.	1. June 2005 - Obtained list of the major VOC and NOx emitters in county and plan to meet with these companies to discuss concerns regarding attainment issues. 2. Stakeholder meeting held with large employers in Lexington County to discuss the air quality situation and possible solutions. Thirty eight letters were mailed to businesses and industry with over 100 employees. Of those 17 people attended the July 18 meeting and three who could not attend requested materials from the meeting be forwarded to them. Along with the air quality presentation there was information handed out on Best Workplace for Commuters, Take a Break from the Exhaust and Energy Star. 3. The District's focus is on soil and water issues and their time is currently completely occupied by those issues. An interest was expressed by one member of the District in volunteering during Air Quality events, but only if time allows.	2. July 18, 2006	Directionally sound	Directionally sound	N/A	

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Landscaping	1. Planting of approximately 10-15 acres of trees and/or shrubbery for additional landscaping areas on Lexington County owned property that will reduce mowing and the use of gas powered lawn equipment. 2. Lexington County Planning /Department working with County Council and developers for proposed scenic corridors throughout the county for preservation of natural scenic roadways. 3. Lexington County has one (1) municipality that is designated as "Tree City USA", and that is the Town of Lexington. There are several municipalities (Irmo, Gilbert, West Columbia, Cayce, Chapin) within Lexington County that currently have Tree Ordinances in place for development. Lexington County also has a Landscaping Ordinance in place.	1. Planted trees Jan.-Mar. 2005. 2. The progress on creating scenic corridors in the County is slow due to the issue of the location of utilities in public easements along the side of the road. Trees along roadways pose a threat to the proper function of utilities located in right-of-ways. The County Planning Department is considering residential buffers in lieu of scenic corridors. The Director of Planning and GIS met with the County Administrator concerning the scenic corridor concept and the idea was endorsed by her. There are plans to take this idea before the planning commission before the end of the calendar year if the December 21, 2006 meeting is not canceled due to the holidays.	1. Planted trees Jan.-Mar. 2005.	Directionally sound	Directionally sound	N/A	
Seminar/Presentations attended by Lexington County to further their knowledge of Air Quality	1. May 25, 2005 attended Dr. Dave Nowak-"Understanding the Effects of the Urban Forest on Air and Water Quality". 2. June 22, 2005 participated in a conference call EPA, STATE, LOCAL partners and Office of Transportation and Air Quality to discuss how the "Best Work Places for Commuters" can help EACs. 3. August 23-25, 2005 attended the Southern Transportation and Air Quality Summit (STAQS) Conference. 4. November 3, 2005 Participated in conference call with DHEC and Richland County for guidance for the EAC Report due December 2005. 5. March 13-14, 2006 attended the Midlands Low Impact Development Workshop presented by the Midlands Urban Conservation Committee. 6. April 18, 2006 participated in a conference call with DHEC and other EAC members across the state concerning the 2006 EAC Summit in August 2006. 7. July 18, 2006 attended an afternoon presentation by Mr. Fred Blood on Plug-in-Hybrids at the SC Energy Office. 8. August 16-17, 2006 attended the SC Early Action Compact Summit at the Carolina Convention Center.	1. Dr. Dave Nowak-"Understanding the Effects of the Urban Forest on Air and Water Quality". Seminars and presentations are attended as they are offered and depending on budget allowances		Directionally sound	Directionally sound	N/A	
Proposed air quality projects	1. Lexington County in partnership with other agencies are looking into holding a gas powered lawn mower/lawn equipment exchange. 2. Lexington County in partnership with other agencies are looking into holding a Kerosene Can exchange. 3. Lexington County in partnership with other agencies are looking into holding a Gas Cap Replacement/Gas Cap Wrenches event. 4. Co-sponsor with Richland County and SCDHEC a vehicle maintenance check event for National Car Care Month at South Carolina State Museum.	1. The lawn mower exchange is tentatively scheduled for April/May 2007. On September 2006 a needs assessment survey created by DHEC and administered by Zoomerang was mailed out to all Lexington County, Richland County and DHEC stakeholders. This survey helped determine the amount of a discount consumers expect for trading in a gas powered lawn mower as well as consumers willingness to switch to an electric mower. After various meetings it was determined that before further planning for the exchange event could be conducted the information gathered in the survey was needed. A post survey meeting was held on November 8, 2006. 4. 60 vehicles were checked for proper maintenance	1. Postponed due to funding 4. April 1, 2006	Directionally sound	Directionally sound	N/A	Additional information submitted in December 2004 Progress Report See Comment #5
Public Awareness/Education	1. Providing/incorporating Air Quality information in county newsletter that goes to all employees. 2. Working with county GIS department for the introduction of an Environmental link for the Public Works Department discussing Air Quality and related issues-hopefully implemented in 2006. 3. Spoke with Mid Carolina Electric Co-Op about publishing Air Quality information in their newsletter that is distributed to all MCEC customers-hopefully 2006. 5. Signed up as an It All Adds Up to Cleaner Air Community 6. Information concerning summer air quality information was posted on PBT Cable Channel 2 during the entire summer months. This information was from the It All Adds Up to Cleaner Air community partner summer seasonal materials. 7. Information concerning fall air quality information was posted on PBT Cable Channel 2 and the Town of Lexington's local cable access channel. This information was from the It All Adds Up to Cleaner Air community partner fall seasonal materials. 8. Eight organizations in Lexington County attended the August 16-17 EAC Summit.	June 2005 - update on educational air quality presentations for schools.... also working with landscape "guru" on educational/outreach presentations to local organizations... 2. Abandoned see item 13 7. The information will run for the entire fall season and will be replaced with winter tips at the season's change.	1. June 2006 first article will appear. 5. Signed up May 2006	Directionally sound	Directionally sound	N/A	
Public Awareness/Information	1. Lexington County, with input from DHEC, is designing and constructing an Ozone Action sign that will display during the Ozone season the ozone alertness level. This will be posted at a heavily traveled intersection in Columbia. 2. Ozone Awareness Week 2005 posters were displayed at the County Administration building along with brochures for all citizens and employees. 3. 1200 brochures for spring season awareness were attached to employee paychecks on March 31, 2005 concerning Ozone Awareness. 4. Press release about Ozone Awareness Week along with the Governor's Proclamation was hand delivered to Citadel Broadcasting Corp, Clear Channel marketing, Inner City Broadcasting, Glory Communications and Broomfield Broadcasting. 5. PSA's formatted for Lexington County were distributed to Citadel Broadcasting Corp, Clear Channel marketing, Inner City Broadcasting, Glory Communications and Broomfield Broadcasting for Ozone Awareness Week 2005. 6. Sign up for Take a Break from the Exhaust alternative commute program. 7. Ozone Alerts on high level ozone dayse were forwarded to all Departmet Heads in the County with a request. 8. Live read radio PSA announcements were mailed to local radio stations on July 13, 2006. 9. August 15, 2006 Air quality handouts were put on display at the County Administration building. 10. Advertised for the American Lung Association's Asthma Walk in the October issue of the County Scoop. 11. September 21, 2006 Attended the Home Builders Seminar in Columbia and presented information on a 12. September 27, 2006 conducted an air quality presentation at the Midlands Urban Conservation Committ 13. September 26, 2006 Myra Reese with the SCDHEC conducted a presentation of the air quality status in 14. October 18, 2006 New air quality information was displayed at the County Administration building. 15. September 25, 2006 Mailed information on the "Change a Light, Change the World" campaign to the air 16. October 18, 2006 Mailed a letter to the 36 large employers in Lexington county with enclosed fall air q 17. October 11, 2006 Information was emailed to stakeholders about the National Alternative Fuel Vehicle	6. This program developed by DHEC, encourages users to take voluntary actions in order to reduce vehicle miles traveled, which in turn reduces the precursors of ground level ozone. 7. DHEC PSA's distributed to the Town of Lexington for broadcast on the local cable access channel. They have not run to date, but will be included in the line up when space needs to be filled. 8. Follow up was conducted with the radion stations a week after the PSA's were mailed. There was no response. 16. Three employers requested additional handouts. Nucor Building Supply posted teh handouts in their building and will pass out the smaller handouts to all employees. Shaw Industries called to thank the County for providing the information to them. FB Johnston Graphics requested a non color copy of the handouts to pass out to employees. Glassmaster requested 120 copies of the handout along with an article for their company newsletter. Information on Best Workplace for Commuters, Energy Star, Anti-idling and ride sharing was also forwarded to the Glassmaster and Nucor Building Supply.	4-5. Spring 2005 6-7. June 2006 7. July 21, August 1, August 2, 2006 8. July 13, 2006	Directionally sound	Directionally sound	N/A	(http://www.lexington1.net/gms/school happenings.html#wetland)
Education of environmental issues within school systems	1. Amy Curran, DHEC, has been involved for 3 years with Gilbert Middle School for the implementation of wetlands, observation area, and kiosk. 2. She conducted an outdoor workshop with the students on air quality. 3. Amy also taught the 7th grade at Northside Middle School the science curriculum incorporating the health and environmental issues of air quality. 4. Implement the B2 @ School (Breathe Better at School) program in schools in Lexington County. This program's mission is to reduce vehicle emissions around school campuses for healthier children-reduce asthma and respiratory contributors.	1. On going project since 2003 2. Held on Oct. 25, 2005 3. Taught class on Nov. 15, 2005 4. Crossroads Middle School implemented a no idling policy. August 8, 2006 contacted Al Gates the Science Education Coordinator with Lexington Richland School District 5 concerning the B2 @ School program. On October 11 and 13, 2006 attended meetings with the science teachers in Lex/Rich School Dist 5 where information on the B2 @ School program was presented.	Started in 2003 and is a continuing effort. 4. More schools in the same district as Crossroads Middle School will be approached starting in the summer/fall of 2006 for implementation of the program.	Directionally sound	Directionally sound	N/A	Comments #7 (www.scwf.org/)
Recognition by SC Wildlife Federation	Lexington County Planning Department working with County Council and developers for proposed scenic corridors throughout the county for preservation of natural buffers along roadways.		2005 recognition received.	Directionally sound	Directionally sound	N/A	
Join and participate in Clean Cities	Become a stakeholder in Clean Cities and become active in meetings. This partnership shall increase public awareness of the environment issues of air quality that Lexington County is working to better.	May 2006 contacted Wendy Bell of the Catawba COG for more information on the Clean Cities initiative.	May-06	Directionally sound	Directionally sound	N/A	
1300 employees receive Ground Level Ozone Awareness Information in Pay stubs	Comments #7 and 8	Mar. 31, 2005	March 31, 205				
Gas Can Exchange Events	1. Co-sponsor with Richland County and SCDHEC 2 gas can exchange events located at the former Bush River Mall and at the Sandhills Research/Education Center	1. A total of 290 old gas cans exchanged for new environmentally safe cans.	The events were held on June 5, 2004 and October 16, 2004	411.68 lbs/year		Michelin donated cans for both events	
School Bus Retrofit Project	Approximately 28 diesel buses will be retrofitted particulate filters during 2006. (additional reductions of PM are also expected)		2006	476 lbs/year	N/A	N/A	CO reductions 3,332 lbs/year December 2004 EAC SIP - Appendix 16 See Comment 6

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<p align="center">DECEMBER 2006 LEXINGTON COUNTY</p> <p align="center">Based on stakeholder consultation and taking into consideration resource and political constraints, the following control measures are under consideration pending modeling that demonstrates compliance in 2007 by SCDHEC.</p>							
Air Quality Awareness and Improvement Policy	<p>1. Memorandum sent to all County department heads as well as elected officials and presented before County Council on August 24, 2004 and adopted as written; for the purpose of establishing certain principle that will guide the recurring activities of County government.</p> <p>Effective immediately:</p> <ol style="list-style-type: none"> 1. Encourage that all county employees are notified of upcoming Ozone Action Days. 2. Implement car-pooling opportunities, when feasible. <ul style="list-style-type: none"> - Ride share to work - Ride to lunch and/or meetings with fellow employees 3. Ensure that all County vehicles/equipment are operating according to the manufacturer's specifications. 4. Restrict vehicle idling to no more than 10 minutes. Exceptions include emergency vehicles, traffic/weather conditions, and vehicles being repaired, maintained, or inspected. 5. Restrict mowing and use of gas powered lawn equipment on County property on Ozone Action Days. 6. Restrict mowing by landscaping additional areas of county property. 7. Restrict all outdoor burning on Ozone Action Days. 8. Practice energy conservation in all County facilities. <ul style="list-style-type: none"> - Turn off computers and lights in the office at the end of the day - Turn off all office lights when not in use 9. Include environmental considerations in purchasing decisions for goods and services. An example of such is purchasing energy efficient light bulbs. 10. Purchase the lowest-emission vehicles practical to meet County needs. This may include the purchase of hybrid vehicles. 11. A memo to department heads with instructions to circulate among employees and post in the department to be distributed based in reports received through the Enviroflash program. Enviroflash is a program sponsored by the EPA that provides important air quality information such as forecasts and action day notifications via email or pager notifications. 	<ol style="list-style-type: none"> 1. Lexington County website has a link to the DHEC site with the Ozone Action Days. 2. County sent memos August 2005, to all employees to see the interest to carpooling. 3. All County employees are to turn off computers and lights when leaving at the end of each day. 	<p>Effective immediately - October 6, 2004</p> <p>May 2006-Ozone Policy re-distributed to county employees</p>	Directionally sound	Directionally sound	N/A	The commitment to address these activities has been assured by the County Administrator and was presented before County Council on August 24, 2004 and adopted as written. 1. See comment #6
1. Designate an Ozone Action Coordinator	The County will dedicate a staff person as the Ozone Action Coordinator.	In 2003 the Lexington County Administrator Art Brooks delegated the responsibilities of this program to the Director of Public Works John Fechtel. In 2004 the County appointed Sheri Armstrong as the Environmental Coordinator to serve as the EAC contact as well as the coordinator of the County's National Pollutant Discharge Elimination System (NPDES) Phase II permit. A new Environmental Coordinator, Synthia Williams, was hired in April 2006 to focus solely on the County's environmental programs. Although Synthia Williams is the primary EAC contact, both Sheri Armstrong and John Fechtel receive questions from County Council and employees concerning the EAC and are kept abreast of the program.	Completed in 2003 and continuing.				
2. Ozone Action Contacts	Establish industry/local government contact persons	On June 6, 2005, the County met with David Farren, Southern Environmental Law Center (SELC) and elected official from Lexington and Richland County to discuss "nonattainment" and goals to meet standards for ground level ozone. They also informed the County of the release of the Columbia area air quality report by SELC. A meeting with major industries to discuss the ozone situation was planned for late July (2004). This meeting did not happen due to job demands outside of the Ozone program on the previous Environmental Coordinator. Hiring a new Environmental Coordinator who will focus entirely on environmental issues will allow more time to be devoted to increasing stakeholder involvement. June 2005 - Obtained list of the major VOC and NOx emitters in county and plan to meet with these companies to discuss concerns regarding attainment issues. Due to time and staff constraints industries were not contacted previously, with the hiring of a new Environmental Coordinator more time can be allocated to increasing stakeholder involvement. A new list will be delivered to the County in the summer of 2006. The county. It was discussed with Lexington Soil and Water Conservation District to partner with us on a	Completed in 2004 and continuing. Industry contacts were made after the Lexington County stakeholder meeting in July. Those industries are included in any air quality information that is dispersed by the County. The list will continually be updated as new contacts are made.	Directionally sound	Directionally sound	N/A	
3. Park and Ride lot at Highway 378 and I-20	The 378 and I-20, Park and Ride Lot, during the majority of 2006 year has been to capacity or greater.	The 378 and I-20, Park and Ride Lot, during the majority of 2006 year has been to capacity or greater. This process was previously handled through visual inspection and counting of the cars once a week. The parking facility holds 47 cars. During the July stakeholder meeting the attendees were asked to consider shopping center or churches near their facilities that could be used as possible park and ride locations.	Weekly counting began May 17, 2006. Completed 2003-2004 and continuing. There are approximately 20-25 cars using the park and ride facility.	1,848 lbs/year	952 lbs/year	N/A	CO reductions 7,297 lbs/year December 2004 EAC SIP - Appendix 16 See Comment 6
4. Alternate work schedule	Discuss with industry, companies, municipalities, county departments	Please see the Ozone Policy adopted August 24, 2004 (attached). Lexington County surveyed employees (9/2005) as to the feasibility for department to go to 10-hour work schedules. One department within Public Works (11 employees) started October 1, 2005. The Fleet Services department has 1 employee that works an alternate schedule from 7 a.m. to 3 p.m. June 2006-Lexington County signed up for Take a Break from the Exhaust a web based program that tracks behavior changes by assigning points to a variety of activities. This program, developed by DHEC, encourages users to take voluntary actions in order to reduce vehicle miles traveled, which in turn reduces the precursors of ground level ozone. After an introductory period that will be used to learn the basics of the program by the Public Works Department, the program will be offered to all County employees for participation. Information about TABFTE and how individuals could sign up for the program was listed in the August 2006 County Scoop newsletter. There was no interest from employees to sign up for the program. In order to increase interest for the 2007 ozone season, donations from Local Industries will be informed of the Take a Break from the Exhaust program during the J	Completed in 2004 and continuing.	Directionally sound	Directionally sound	N/A	See Comment #2 (Contact Sheri Armstrong/803-785-8631/sarmstrong@lex-co.com)

A. Control Measure under Consideration	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
5. Bio-diesel /alternate fuels use	Discuss with industry, companies, municipalities, county departments, investigate feasibility of these methods.	Lexington County will write and distribute a letter of encouragement for the use of bio-diesel/alternative fuels to each of the municipalities. A copy will be included in next progress report. Local industry will be informed of the benefits of AFV at the July stakeholder meeting (tentative see Measure 2) and invited to the August Early Action Summit to receive more information on AFV. o There were 1,120 gallons of biodiesel purchased in 2004 in Lexington County. There are approximately 60 alternative fuel vehicles operating within federal, state, county, and municipal government. As directed by the County Administrator all future purchases will be either Hybrids or AFVs, if practicable. 12 alternative fuel vehicles in the county fleet o Tri-axes are equipped with Engine Control Software to monitor vehicle usage. Idle time is set for 5 min. and then automatic shut off. o The caterpillar engines being purchase have the ACERT Technology. The Caterpillar engines that were purchased for County are meeting the air quality standards proposed for 2007. o The County purchased 35 Impalas (more efficient) instead of Crown Vic for the sheriff dep o VDO system on County vehicles monitors driving habits o Fleet are maintained 3 month or 5,000 miles, if not maintained the fuel dispensers will not o A letter was mailed in May 2006 to all municipalities within Lexington County encouraging o By December 2005, Schwan's Home Service, Inc. will convert 11 heavy-duty trucks from o Carolina fleet of 67 trucks located at depots in Greenville, Lexington, Charleston and o Florence is 60 percent propane fueled Central Midlands Regional Transit Authority (CMRT) o The Governor signed Hybrid vehicle bill H4312 on June 1, 2006. Act 312, R371, H4312 B	Completed in 2005 and continuing. May 2006 letter mailed to municipalities in the County.	Directionally sound	Directionally sound	N/A	
Bio-diesel /alternate fuel stations available in Lexington County	1. Pitt Stop Convenience Store, (E85) 5019 Augusta Road 2. United Energy (Bio-diesel and E85) 2470 Fish Hatchery Road 3. Pitt Stop No. 42 (E85) 1928 Airport Blvd 4. Immo C-Mart (E-85) 7353 Nursery Road 5. Pitt Stop # 41 (E-85) 1005 Old Cherokee Road	All sell alternative fuels	Pitt Stop gas stations will continue to offer E85 at new gas stations.	Directionally sound	Directionally sound	N/A	See Comment #2 (http://www.cat.com)
6. Idle Reduction	Establish County policies to reduce or stop idling time	15 trucks have Engine Control Module software that idling time is set for 5 minutes. Caterpillar has incorporated this in the engine software. (ACERT Technology) This technology will continue to be considered by the County for installation in other vehicles. See measure four of the Air Quality Awareness and Improvement Policy.	Completed in 2004 and continuing. Added to trucks in 2004.	Directionally sound	Directionally sound	N/A	See Comment #2 (www.state.sc.us/energy/renewable%20energy/lmop.htm)
7. Landfill Methane Reduction (Methane Recycling System to be online February 2006)	Screaming Eagle Landfill owned by Waste Management accepts approximately 100,000 tons/yr of municipal solid waste from Lexington County.	Methane Recycling System was brought online on February 21, 2006.	Feb. 21 2006	Directionally sound	Directionally sound	N/A	
Landfill Methane Outreach Program (LMOP) Participant	1. Program that aids the reduction of methane emissions from landfills by encouraging the recovery and use of landfill gas as energy source. (www.epa.gov/landfill/index.htm) Lexington County looking to find possible use of flared methane at the 321 Landfill. 2. The County is researching various ways to recycle the methane produced at the 321 Landfill. One possibility is to become a partner in the Chicago Climate Exchange (CCX) which allows emissions trades for greenhouse gas emissions. The Landfill Gas Collection and Control System at 321 Landfill could be considered as an offset project to greenhouse gas emissions.	1. The Landfill Gas Collection and Control System which includes flaring started operation on October 17, 2001. 2. The application for CCX is being prepared by the County's LMOP consultant. This information must be agreed upon by the County Council before the application can be submitted. This application will be presented to council after further research into the CCX and other methane recycling options is explored.	1. 10/17/2001 2. Winter 2007	Directionally sound	Directionally sound	N/A	www.santeccooper.com
Support efforts to create a regional air quality committee.	1. Interest was expressed by the Lexington County Administrator in the County sending a joint letter with the Richland County Administrator to the Central Midlands Council of Governments. The letter would request that the COG take the lead in setting up a regional air quality committee. 2. The City of Columbia has created a Climate Protection Action Committee. The committee is charged with creating an action plan to reduce municipal greenhouse gas emissions and submit this plan to the City Council within 6 months.	2. Lexington County is represented as an advisory member on the City of Columbia's Climate Protection Action Committee. The action plan that is developed by the Climate Protection Action Committee can serve as a basis for a regional air quality committee.	December 2006-Action Committee's first meeting.				
Improve Traffic Congestion	1. Offer commuters an alternative ride on ozone action days. 2. The Town of Lexington approved spending \$14,000 for equipment needed to synchronize traffic lights to improve traffic flow on Columbia Avenue and Main Street. The Town will first monitor traffic at 20 intersections and the traffic lights will be timed based on the monitoring data. It is thought that this will reduce the congestion in this part of the town.	1. Only July 31, 2006 the Central Midlands Regional Transit Authority announced they would offer free rides on their Smartride buses on Ozone Action Days. 2. Other traffic improvements are planned to be completed by the town within 5 years.	1. July 31, 2006 2. October 2, 2006				
Outdoor Burning Ordinance	The Town of Lexington approved spending \$14,000 for equipment needed to synchronize traffic lights to improve traffic flow on Columbia Avenue and Main Street. The Town will first monitor traffic at 20 intersections and the traffic lights will be timed based on the monitoring data. It is thought that this will reduce the congestion in this part of the town.	County and DHEC personnel met on October 16 to come up with open burning regulations. The recommendations that were presented to County Council on October 24, 2006 were: Exemptions: Vegetative debris burning related to forestry, wildlife and agricultural burns, as authorized by the state forestry commission Open burning in the connection with the preparation of food for immediate consumption, or campfires and fires used solely for recreational purposes, ceremonial occasions or human warmth that are done in a safe manner. Fires set for the purposes of training public fire-fighting personnel when authorized by the appropriate governmental entity. These will be exempt only if the drills are solely for the purposes of fire-fighting training and the duration of the burning is held to the minimum required for such purposes. Prior approval is required only for sites which are not established training sites. (From Greenville County Ordinance) Fires in a residential subdivision: The burning must be located not less than 500 feet from any structure and not less than 500 feet from the property line and adequate provision is made to prevent the fire from spreading. Fires prohibited by the ban: Fires associated with the burning of debris on site by a licensed contractor during new construction. Proposed open burning bans: 1. No burning is allowed except as listed in the exemptions at any time of the year. 2. No burning is allowed except as listed in the exemptions during the Ground Level Ozone season. 3. No burning is allowed except as listed in the exemptions on days when the Air Quality Index is 10 or greater. These recommendations are proposed in an effort to lower limits of ground level ozone. It is the recommendation of the Lexington County Council that County staff and DHEC meet with the Home	Exact ordinance language still under discussion. No specific date is available at this time.				
Comments: 1. December 2004 - SC EAC SIP - activity not quantified for several reasons (first) in accordance with EAC Protocol, after all adopted Federal and State controls were accounted for in the modeling, it was determined that local controls were not necessary to demonstrate attainment of the 8-hour ozone standard. Measures were submitted by the local areas to show their continued support and commitment to the EAC process. (second) this activity is directionally sound and should provide air quality benefits and in some cases measurable results. The progress toward implementing this activity and the benefits derived will be documented as a part of the ongoing reporting requirements. 2. December 2003 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac.html - additional information provided by the county to include "findings", "advantages/disadvantages", "recommendations", "costs", etc.... 3. March 2004 - Local Early Action Plan - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0304.asp 4. June 2004 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0604.asp 5. December 2004 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_1204.asp 6. December 2004 - SC EAC SIP - Including Appendix 8 (Local Early Action Plans and the Air Quality Awareness and Improvement Policy) and Appendix 16 (County Level Emission Reductions and Descriptions for the Ozone EAC Areas) - See - http://www.scdhec.gov/eqc/baq/html/eap_sip.html 7. April 20, 2005 - Correspondence to Mr. Palmer including clarifying supplemental information to the EAC SIP submittal of December 2004. - See - http://www.scdhec.gov/eqc/baq/html/eap_sip.html 8. June 2005 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0605.asp							

December 2006 Early Action Compact Progress Report
Local Strategies-County of Lexington
Prepared by Synithia Williams

In an effort to keep our contact information updated we have provided the following information for the county:

	Name	Telephone	E-mail Address
Administrator/Manager	Katherine Doucett	(803) 785-8100	kdoucett@lex-co.com
EAC contact	Synithia Williams	(803) 785-8634	swilliams@lex-co.com

The following activities listed were included in the December 2004 EAC State Implementation Plan (SIP) submittal and the December 2005 Progress Report. Each of the activities listed were not quantified for several reasons. First, in accordance with the Protocol for EACs, after all Federal and State controls were accounted for in the modeling, it was determined that local controls were not necessary to demonstrate attainment of the 8-hour ozone standard. Based on stakeholder consultation and taking into consideration resource and political constraints, the following control measures are under consideration pending modeling that demonstrates compliance in 2007 by SCDHEC.

1. Designate an Ozone Action Coordinator

Description of Measure

The County will dedicate a staff person as the Ozone Action Coordinator.

- In 2003 the Lexington County Administrator Art Brooks delegated the responsibilities of this program to the Director of Public Works John Fechtel.
- In 2004 the County appointed Sheri Armstrong as the Environmental Coordinator to serve as the EAC contact as well as the coordinator of the County's National Pollutant Discharge Elimination System (NPDES) Phase II permit.
- A new Environmental Coordinator, Synithia Williams, was hired in April 2006 to focus solely on the County's environmental programs. Although Synithia Williams is the primary EAC contact, both Sheri Armstrong and John Fechtel receive questions from County Council and employees concerning the EAC and are kept abreast of the program.

Estimate of Emission Reductions (if available)

Not applicable. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2003 and continuing.

2. Ozone Action Contacts

Description of Measure

The County will establish industry/local government contact persons.

- On June 6, 2005, the County met with David Farren, Southern Environmental Law Center (SELC) and elected official from Lexington and Richland County to discuss "nonattainment" and goals to meet standards for ground level ozone. They also informed the County of the release of the Columbia area air quality report by SELC.
- A meeting with major industries to discuss the ozone situation was planned for late July (2004). This meeting did not happen due to job demands outside of the Ozone program on the previous Environmental Coordinator. Hiring a new Environmental Coordinator who will focus entirely on environmental issues will allow more time to be devoted to increasing stakeholder involvement.
- June 2005 - Obtained list of the major VOC and NOx emitters in county and plan to meet with these companies to discuss concerns regarding attainment issues. Due to time and staff constraints industries were not contacted previously, with the hiring of a new Environmental Coordinator more time can be allocated to increasing stakeholder involvement. A new list will be delivered to the County in the summer of 2006. The county plans to contact the industries on the list and discuss the results of non-attainment and strategies that can be implemented to lower ozone levels
- A letter will be mailed out during the first week of July 2006 to the 2005/2006 principal employers in Lexington County inviting them to an information session concerning ozone pollution, the EAC and how it could affect them. The tentative date for this meeting is the third week of July 2006 depending on availability of meeting facility and industry interest.
- Stakeholder meeting was held with large employers in Lexington County to discuss the air quality situation and possible solutions. Thirty eight letters were mailed to businesses and industry with over 100 employees. Of those 17 people attended the July 18 meeting and three who could not attend requested materials from the meeting be forwarded to them. Along with the air quality presentation there was information handed out on Best Workplace for Commuters, Take a Break from the Exhaust and Energy Star.
- It was discussed with Lexington Soil and Water Conservation District to partner with us on air quality issues. The District's focus is on soil and water issues and their time is currently completely occupied by those issues. An interest was expressed by one member of the District in volunteering during Air Quality events, but only if time allows.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2004 and continuing.

3. Park & Ride Facilities

Description of Measure

Staff will be contacting churches, shopping centers, etc. with large parking lots to discuss park & ride program.

- The 378 and I-20, Park and Ride Lot, during the majority of 2006 year has been to capacity or greater. This process was previously handled through visual inspection and counting of the cars once a week. The parking facility holds 47 cars.
- During the July stakeholder meeting **the attendees were asked to consider shopping centers or churches near their facilities that could be used as possible park and ride locations.**

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed 2003-2004 and continuing.

4. Alternative work schedule

Description of Measure

Discuss with industry, companies, municipalities and County departments the possibility of alternative work schedules.

- Please see the Ozone Policy adopted August 24, 2004 (attached).
- Lexington County surveyed employees (9/2005) as to the feasibility for department to go to 4 10-hour work schedules. One department within Public Works (11 employees) started October 1, 2005. The Fleet Services department has 1 employee that works an alternate schedule from 7 a.m. to 3 p.m.
- June 2006-Lexington County signed up for Take a Break from the Exhaust a web based program that tracks behavior changes by assigning points to a variety of activities. This program, developed by DHEC, encourages users to take voluntary actions in order to reduce vehicle miles traveled, which in turn reduces the precursors of ground level ozone. After an introductory period that will be used to learn the basics of the program by the Public Works Department, the program will be offered to all County employees for participation.
Information about TABFTE and how individuals could sign up for the program was listed in the August 2006 County Scoop newsletter. There was no interest from employees to sign up for the program. In order to increase interest for the 2007 ozone season, donations from local businesses will be solicited to give as prizes to the person or team who showed the best effort at reducing pollutants based on their inputs into the TABFTE program.
- Local industries **were** informed of the Take a Break from the Exhaust program during the July stakeholder meeting.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2004 and continuing.

5. Bio-diesel/Alternative fuels

Description of Measure

Companies, municipalities, county investigate feasibility of these methods.

- There were 1,120 gallons of biodiesel purchased in 2004 in Lexington County. There are approximately 60 alternative fuel vehicles operating within federal, state, county, and municipal government. As directed by the County Administrator all future purchases will be either Hybrids or AFVs, if practicable.
- 12 alternative fuel vehicles in the county fleet. **Four additional alternative fuel vehicles are being considered for purchase. This purchase must first be approved by County Council at their December meeting.**
- Tri-axes are equipped with Engine Control Software to monitor vehicle usage. Idle time is set for 5 min. and then automatic shut off.
- The caterpillar engines being purchase have the ACERT Technology. The Caterpillar engines that were purchased for County are meeting the air quality standards proposed for 2007.
- The County purchased 35 Impalas (more efficient) instead of Crown Vic for the sheriff department. 35 more were ordered for the 2006 calendar year and are pending delivery. Late delivery is due to procurement process.
- VDO system on County vehicles monitors driving habits.
- Fleet is maintained 3 month or 5,000 miles, if not maintained the fuel dispensers will not work for the vehicle.
- A letter was mailed in May 2006 to all municipalities within Lexington County encouraging them to switch to alternative fuel vehicles and to consider adopting the Ozone Policy adopted by the County. (copy attached)
- Pitt Stop No. 42 (E85) located at 1928 Airport Blvd, Pitt Stop Convenience Store, (E85) located at 5019 Augusta Road, United Energy (Bio-diesel and E85) located at 2470 Fish Hatchery Road , **Irmo C-Mart (E-85) 7353 Nursery Road, Pitt Stop # 41 (E-85) 1005 Old Cherokee Road** all sell alternative fuel in Lexington County.
- By December 2005, Schwan's Home Service, Inc. will convert 11 heavy-duty trucks from gasoline to propane and it is anticipated that the converted trucks will be located at their depot in Lexington. In addition, propane fueled trucks from Augusta, Georgia and Monroe, North Carolina service customers in South Carolina. Schwan's current South
- Carolina fleet of 67 trucks located at depots in Greenville, Lexington, Charleston and
- Florence is 60 percent propane fueled. Central Midlands Regional Transit Authority (CMRTA), the public transportation system for the Central Midlands area, has 7 buses that operate on compressed natural gas.
- The Governor signed Hybrid vehicle bill H4312 on June 1, 2006. Act 312, R371, H4312 Bill may be viewed at http://www.scstatehouse.net/sess116_2005-2006/bills/4312.htm and its caption reads: An act to amend the Code of Laws of South Carolina, 1976, by adding Section 12-6-3377 so as to allow a state income tax credit equal to twenty percent of certain new hybrid, fuel cell, alternative fuel, or lean burn technology motor vehicle. Credits allowed against a taxpayer's federal income tax liability.
- Local industry **was** informed of the benefits of AFV at the July stakeholder meeting and invited to the August Early Action Summit to receive more information on AFV.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2005 and continuing.

6. Idle Reduction

Description of Measure

Establish County policies to reduce or stop idling time.

- 15 trucks have Engine Control Module software that idling time is set for 5 minutes. Caterpillar has incorporated this in the engine software. (ACERT Technology) This technology will continue to be considered by the County for instillation in other vehicles.
- See measure four of the Air Quality Awareness and Improvement Policy.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2004 and continuing.

7. Landfill methane reduction

Description of Measure

Analyze methane production and reduction, recycling efforts.

- Screaming Eagle Landfill owned by Waste Management accepts approximately 100,000 tons/yr of municipal solid waste from Lexington County. This gas to energy recycling system was brought online on February 21, 2006.
- Landfill Methane Outreach Program (LMOP) Participant. Program that aids the reduction of methane emissions from landfills by encouraging the recovery and use of landfill gas as energy source. (www.epa.gov/landfill/index.htm) The 321 Landfill began the landfill gas extraction (LFG) system on October 17, 2001. The LFG collection and control system (GCCS) consists of a blower that draws an active vacuum through eight collection (extraction) wells placed within the northeast end of the 321 Landfill cap for capture of the LFG generated within the landfill mass. The gas control (flare) system is equipped with fully automated “fail-safe” controls for operation of the system with minimal interruption. The pumping station operates pneumatically and pumps the condensate to a 4000-gallon aboveground storage tank adjacent to the flare system. The flare is operated in the timer mode where it runs for approximately eleven hours and is off for the remainder of the day due to the relatively poor landfill gas quality. System effectiveness is maintained and an overall decline in methane levels has been witnessed since initiation of operations. The timing cycle maintains minimum manufacturer recommendations regarding LFG quality to support combustion at the flare. Due to the relatively poor landfill gas quality it would be cost prohibitive to set all of the collection probes on the flare system.
- The County is researching various ways to recycle the methane produced at the 321 Landfill. One possibility is to become a partner in the Chicago Climate Exchange (CCX) which allows emissions trades for greenhouse gas emissions. The Landfill Gas Collection and Control System at 321 Landfill could be considered as an offset project for greenhouse gas emissions. The application for CCX is being prepared by the County's LMOP consultant. This information must be agreed upon by the County Council before the application can be submitted. This information will be presented to council after further research into the CCX and other methane recycling options is explored.

Estimate of Emission Reductions (if available)

Not available. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Date

Completed in 2001 and continuing.

Measures not included in the December 2004 SIP submittal

The following activities were not listed in the December 2004 SIP submittal under Appendix 8 – Local Action Plans, but are additional measures achieved in the Lexington County Area.

****Described in Appendix 16 – County Level Emission Reductions and Descriptions for the Ozone Early Action Compact Areas of the December 2004 SC SIP submittal.**

1. School Bus Retrofit Project-Approximately 28 diesel buses will be retrofitted with particulate filters during 2006. Additional reductions of PM are also expected. **

- The school buses may not be retrofitted until 2007 when ultra-low sulfur diesel is more widely available since the retrofitting technology being applied works best with this new fuel type. The Environmental Protection Agency's ultra-low sulfur diesel fuel requirements went into effect on June 1, 2006. Ultra-low sulfur diesel fuel will be available at retail stations beginning summer 2006.

2. Air Quality Awareness and Improvement Policy **

- Memorandum sent to all County department heads as well as elected officials and presented before County Council on August 24, 2004 and adopted as written; for the purpose of establishing certain principles that will guide the recurring activities of County government.
Effective immediately:
 1. Encourage that all county employees are notified of upcoming Ozone Action Days.
 2. Implement car-pooling opportunities, when feasible.
 - Ride share to work
 - Ride to lunch and/or meetings with fellow employees
 3. Ensure that all County vehicles/equipment are operating according to the manufacturer's specifications.
 4. Restrict vehicle idling to no more than 10 minutes. Exceptions include emergency vehicles, traffic/weather conditions, and vehicles being repaired, maintained, or inspected.
 5. Restrict mowing and use of gas powered lawn equipment on County property on Ozone Action Days.
 6. Restrict mowing by landscaping additional areas of county property.
 7. Restrict all outdoor burning on Ozone Action Days.
 8. Practice energy conservation in all County facilities.
 - Turn off computers and lights in the office at the end of the day
 - Turn off all office lights when not in use
 9. Include environmental considerations in purchasing decisions for goods and services. An example of such would be to purchase Energy Star equipment.
 10. Purchase the lowest-emission vehicles practical to meet County needs. This may include the purchase of Tier II compliant vehicles, alternative fueled vehicles or hybrids.
- Lexington County website has a link to the DHEC site with the Ozone Action Days.

- County sent memos August 2005, to all employees to see the interest to carpooling. Of the 1300 county employees only 42 responses were received showing interest in carpooling.
- All County employees are to turn off computers and lights when leaving at the end of each day.
- May 2006-Ozone Policy re-distributed to Department Heads to display in the Department and pass out to their employees
- A memo to department heads with instructions to circulate among employees and post in the department will be distributed based on reports received through the Enviroflash program. Enviroflash is a program sponsored by the EPA that provides important air quality information such as forecasts and action day notifications via email or pager notifications. **The Ozone Action Day notices were forwarded to department heads on June 21, August 1 and August 2, 2006.**

3. Create Air Quality Website

- A new web page is currently under development specifically for air quality. The format for the website was forwarded to the County's Information Services Department in June 2006 and will be posted pending approval by the County's website development team that consists of top management in the County
- **Lexington County's Public Works Department website was launched in the summer of 2006. On the Public Works site information about ground level ozone and the Early Action Compact is available.**
- **A request to update the website to include fall air quality tips, a fall air quality flash animation and links to federal and state websites was put into the County's IS Department on October 18, 2006. The request has yet to be filled.**

4. Support SCDHEC statewide efforts to reduce ozone levels. - Stakeholder group to support and participate in modeling efforts. Develop stakeholder group to participate in development of regulations (NOx - BACT (Best Available Control Technology Economically Achievable), restrict open burning). **

- December 2004 EAC SIP did include Appendix 16 - SC61-62.2 "Prohibition of Open Burning" regulation with reductions for 2007 calendar year - reductions expected during the ozone season for residential construction waste. Passed on June 25, 2004.
- SC61-62.5, Std. 5.2 "Control of Oxides of Nitrogen) reduction amount for both existing and new sources combined across Lexington and Richland counties for 2007 calendar year. Passed on June 25, 2004

5. Land use/Green Space- a planning study (2005-2006) by COATS (Columbia Area Transportation Study) for bicycle and pedestrian facilities in the Central Midlands regions (Lexington, Richland, Kershaw, and Calhoun Counties) as a viable modal choice. (rsimmons@centralmidlands.org)

- Public Meeting held Nov. 14, 2005
- The final report of this study was released in March 2006 and included Early Action Projects for the construction of bicycle and pedestrian facilities that will be begin

implementation within the first two years after adoption of the plan, depending on funding. They include:

- Establishing a bike route on Center Street in West Columbia
- Construct sidewalks on both sides of August Road (US 1) in Lexington County
- Kick off a new neighborhood sidewalk program in the Town of Lexington
- Add sidewalks on both sides of Columbiana Drive in Irmo
- Improve pedestrian crossings at the intersection of North Main Street (US 1) and Columbia Avenue (US 378) in the Town of Lexington
- Provide sidewalks on both sides of Sunset Boulevard (US 378) on the east side of the Town of Lexington

6. Land-Use Improvement Action

- The Town of Lexington passed through Town Council two streets in The Town of Lexington to be designated as one-way streets to ease traffic congestion. Town Council passed at the Nov. 2005 meeting for Bulter and Main streets to be constructed as one-way.
- The new Stormwater Management Ordinance and Design Manual currently under design for the County's Phase II NPDES permit will include open space requirements such as lowering impervious area amounts and keeping natural vegetation. The second draft of the Stormwater Management Ordinance was received on June 8, 2006. The ordinance will not go before council until a final draft is complete and has been reviewed by the County Attorney for approval.
- Lexington County Council approves encouraging Low Impact Development (LID) in the County, which emphasizes decreasing impervious areas, leaving trees and other vegetation and "green power". May 9, 2006 County Council approved a reduction in land disturbance review fees for the first three project that incorporate LID in their design.
- In May and June 2006 the County's Planning Department and the Public Works has met with the Central Midlands Council of Governments to discuss including LID practices in residential and commercial development in the Midlands area.

7. Green Power Support- MCEC (Mid-Carolina Electric Cooperative) offers the purchase of green power blocks. This power is distributed by Santee Cooper and blocks are currently being purchased by local commercial and residential stewards of the environment. Statewide there are 1300 residential co-op participants. (www.santeecooper.com/greenpower/) One block is equal to 100-kilowatt hours of electricity for residential customers and 200-kilowatt hours of electricity for commercial customers.

- Local businesses supporting are Lowe's, BBT, Kinko, and Wachovia Banks.
- There are 115 residential Green Blocks Customers purchasing 164 blocks of green power in Lexington County as of May 2006. Residents can continue to purchase green blocks on voluntary basis.
- There is an average of 82 blocks of green power purchased by commercial customers in Lexington County as of May 2006. Businesses can continue to purchase green blocks on voluntary basis.

8. Energy Efficiency of New/Renovation of County Buildings

- 2003-2004- All windows in the County Administration Building were replaced with energy efficient windows. The same windows were used in the new Courthouse also.

9. Grant/Fund Proposals

- Lexington County/Richland County applied for grant for Gas Cap Replacement/Gas Cap Wrenches, but did not receive the grant.
- Lexington County will continue to research other grant opportunities to fund future projects. A meeting has been scheduled for June 20, 2006 with the grants librarian at the South Carolina State Library to learn more about researching and preparing grant proposals.

10. Landscaping

- Planting of approximately 10-15 acres of trees and/or shrubbery for additional landscaping areas on Lexington County owned property that will reduce mowing and the use of gas powered lawn equipment. Planted trees from Jan.-Mar. 2005.
- Lexington County Planning /Department working with County Council and developers for proposed scenic corridors throughout the county for preservation of natural buffers along roadways. The progress on creating scenic corridors in the County is slow due to the issue of the location of utilities in public easements along the side of the road. Trees along roadways pose a threat to the proper function of utilities located in right-of-ways. The County Planning Department is considering residential buffers in lieu of scenic corridors. The County adopted the ability to grant scenic corridors designation to street as part of the Landscape ordinance adopted January 1, 2001.
- The Director of Planning and GIS met with the County Administrator concerning the scenic corridor concept and the idea was endorsed by her. There are plans to take this idea before the planning commission before the end of the calendar year if the December 21, 2006 meeting is not canceled due to the holidays.
- Lexington County has one (1) municipality that is designated as "Tree City USA" as of November 2003, and that is the Town of Lexington. There are several municipalities (Irmo, Gilbert, West Columbia, Cayce, Chapin) within Lexington County that currently have Tree Ordinances in place for development. Lexington County also has a Landscaping Ordinance that encourages the preservation of trees and has been in place since January 1, 2001.

11. Seminar/Presentations attended by Lexington County to further their knowledge of Air Quality

- May 25, 2005 attended Dr. Dave Nowak-"Understanding the Effects of the Urban Forest on Air and Water Quality".
- June 22, 2005 participated in a conference call EPA, STATE, LOCAL partners and Office of Transportation and Air Quality to discuss how the "Best Work Places for Commuters" can help EACs.
- August 23-25, 2005 attended the Southern Transportation and Air Quality Summit (STAQS) Conference.

- November 3, 2005 Participated in conference call with DHEC and Richland County for guidance for the EAC Report due December 2005.
- March 13-14, 2006 attended the Midlands Low Impact Development Workshop presented by the Midlands Urban Conservation Committee.
- April 18, 2006 participated in a conference call with DHEC and other EAC members across the state concerning the 2006 EAC Summit in August 2006.
- July 18, 2006 attended an afternoon presentation by Mr. Fred Blood on Plug-in-Hybrids at the SC Energy Office.
- August 16-17, 2006 attended the SC Early Action Compact Summit at the Carolina Convention Center.

12. Public Awareness/Education

- Providing/incorporating Air Quality information in county newsletter that goes to all employees. May 2006-Articles will be placed in Lexington County's bi-monthly newsletter called The County Scoop. These articles will update employees on ozone along with water quality issues and give advice on how individuals can decrease their impact on pollution. First article will appear in the June 2006 newsletter.
- Plans to present bimonthly updates to County Council and then present the updates to local municipalities was not completed due to the strict time constraints of county council meetings/agendas. The Council receives a packet at each meeting with updates that were not discussed on the Council agenda. Updates on the air quality program can be added to this information packet on a bimonthly basis and the subsequent memo mailed out to the local municipalities. The expectation is for these updates to begin after the meeting with the local industries set for July 2006.
- Work with the County GIS department for the introduction of an Environmental link for the Public Works Department discussing Air Quality and related issues. This idea was abandoned due to the work on an Air Quality web page to be featured on the Lexington County website. This web page should be up and running by Summer 2006.
- Spoke with Mid Carolina Electric Co-Op about publishing Air Quality information in their newsletter that is distributed to all MCEC customers. Information linking air quality to Green Power will be forwarded to MCEC during the summer of 2006. Newsletter information has not been forwarded for inclusion in the MCEC newsletter as of this date.
- June 2005 - updated on educational air quality presentations for schools....; also working with landscape "guru" on educational/outreach presentations to local organization. Looking to implement Air Quality seminars with the Lexington County school system in 2006.
- May 2006-Lexington County signed up as an It All Adds Up to Cleaner Air partner. This is a nationwide public education campaign on air quality issues sponsored by the EPA, DOT, and FWA.
- June 2006-PBT Cable agreed to flash ozone awareness fact sheets on their cable access Channel 2. These fact sheets contain the "It All Adds Up to Cleaner Air" logo. This station serves the Gilbert, Pelion, Batesburg-Leesville, Lake Murray area and parts of the Town of Lexington.

- The Town of Lexington was given DHEC PSA's to air on its local cable access Channel 2 (through Time Warner Cable) in April 2006. The PSA's have not run to date, but are being held to add to the rotation when extra space needs to be filled. The Town's local channel reaches 100,000 residents.
- Information concerning summer air quality information was posted on PBT Cable Channel 2 during the summer months. This information was from the It All Adds Up to Cleaner Air community partner summer seasonal materials.
- Information concerning fall air quality information was posted on PBT Cable Channel 2 and the Town of Lexington's local cable access channel. This information was from the It All Adds Up to Cleaner Air community partner fall seasonal materials. The information will run for the fall season and will be replaced with winter tips at the season's change.
- Eight organizations in Lexington County attended the August 16-17 EAC Summit.

13. Public Awareness/Information

- Lexington County, with input from DHEC, is designing and constructing an Ozone Action sign that will display during the Ozone season the ozone alertness level. This will be posted at a heavily traveled intersection in Columbia. —This sign was completed in 2006 and the Public Works Department was honored by SCDHEC for creating the sign. The sign is currently on display at the front of the SCDHEC building on Bull Street in Columbia, SC.
- Ozone Awareness Week 2005 posters were displayed at the County Administration building along with brochures for all citizens and employees.
- 1200 brochures for spring season awareness were attached to employee paychecks on March 31, 2005 concerning Ozone Awareness.
- Press release about Ozone Awareness Week 2005 along with the Governor's Proclamation was hand delivered to Citadel Broadcasting Corp, Clear Channel marketing, Inner City Broadcasting, Glory Communications and Broomfield Broadcasting.
- PSA's formatted for Lexington County were distributed to Citadel Broadcasting Corp, Clear Channel marketing, Inner City Broadcasting, Glory Communications and Broomfield Broadcasting for Ozone Awareness Week 2005.
- Ozone Alerts on high level ozone days were forwarded to all Department Heads in the County with a request to forward the alerts to their employees.
- Live read radio PSA announcements were mailed to local radio stations on July 13, 2006. Follow up was conducted with the radio stations a week after the PSAs were mailed. There was no response.
- August 15, 2006 Air quality handouts were put on display at the County Administration building.
- Advertised for the American Lung Association's Asthma Walk in the October issue of the County Scoop Newsletter. This advertisement included information on how ground level ozone affects asthma sufferers.
- September 21, 2006 Attended the Home Builders Seminar in Columbia and presented information on air quality along with providing information on Energy Star and electric lawnmowers.

- September 25, 2006 Mailed information on the "Change a Light, Change the World" campaign to the air quality stakeholders who attended the July meeting, county department heads and other staff members with the message to pass it on to others.
- September 26, 2006 Myra Reece with the SCDHEC conducted a presentation of the air quality status in the midlands to Lexington County council.
- September 27, 2006 conducted an air quality presentation at the Midlands Urban Conservation Committee monthly meeting.
- October 11, 2006 Information was emailed to stakeholders about the National Alternative Fuel Vehicle Day Odyssey at York Technical College.
- October 18, 2006 New air quality information was displayed at the County Administration building.
- October 18, 2006 Mailed a letter to the 36 large employers in Lexington county with enclosed fall air quality handouts requesting they make this information available to their employees. Three employers requested additional handouts. Nucor Building Supply posted the handouts in their building and will pass out the smaller handouts to all employees. Shaw Industries called to thank the County for providing the information to them. FB Johnston Graphics requested a non color copy of the handouts to pass out to employees. Glassmaster requested 120 copies of the handout along with an article for their company newsletter. Information on Best Workplace for Commuters, Energy Star, Anti-idling and ride sharing was also forwarded to Glassmaster and Nucor Building Supply.

14. Education of environmental issues within school systems

- Amy Curran, DHEC, has been involved for 3 years with Gilbert Middle School for the implementation of wetlands, observation area, and kiosk. This has been an on going project since 2003.
- She conducted an outdoor workshop with the students on air quality on Oct, 25, 2005.
- Amy also taught the 7th graders at Northside Middle School the science curriculum incorporating the health and environmental issues of air quality on Nov. 15, 2005.
- Crossroads Middle School in Lexington County implemented a no idling policy for buses in 2004. They also encourage parents not to idle while waiting on children and have posted signs in the no idling zones.
- August 8, 2006 contacted Al Gates the Science Education Coordinator with Lexington Richland School District 5 concerning the B2 @ School program. On October 11 and 13, 2006 attended meetings with the science teachers in Lex/Rich School Dist 5 where information on the B2 @ School program was presented.

15. Join and participate in Clean Cities

- May 2006 contacted Wendy Bell of the Catawba COG for more information on the Clean Cities initiative. This partnership shall increase public awareness of the environmental issues of air quality that Lexington County is working to improve.

16. Recognition by SC Wildlife Federation

- On January 22, 2005, Lexington County Council received statewide recognition from the South Carolina Wildlife Federation for its landscape ordinance. The Federation's Forestry award was in recognition of leadership and vision through comprehensive

urban forestry programs recently implemented. Due to the variety of issues involved in a project of this magnitude, the county sought input from experts in landscaping and urban forestry as well as the public in developing the Ordinance. While the County's Ordinance is directed primarily at commercial development, it actually focuses on six different categories. The most important aspect of the Lexington County Landscape Ordinance is that its format enables it to be duplicated in any community regardless of location, political environment, or intensity of development. Air quality benefits of this ordinance are that it will help reduce emissions because of reduced use of gas powered yard equipment and the use of canopy trees in parking lots to cut down on evaporative emissions.

17. Proposed Air Quality Events

- Lexington County, in partnership with other agencies, is looking into holding a gas powered lawn mower/lawn equipment exchange. This event was originally planned for Spring 2006 but was canceled due to budgetary constraints. **The lawn mower exchange is tentatively scheduled for April 2007. On September 8, 2006 a needs assessment survey created by DHEC and administered by Zoomerang was emailed out to all Lexington County, Richland County and DHEC stakeholders. This survey helped determine the amount of a discount consumers expect for trading in a gas powered lawn mower as well as consumers willingness to switch to an electric mower. After various meetings it was determined that before further planning for the exchange event could be conducted the information gathered in the survey was needed. A post survey meeting was held on November 8, 2006.**
- Co-sponsored with Richland County and SCDHEC two gas can exchange events located at the former Bush River Mall and at the Sandhills Research/Education Center. The events were held on June 4, 2004 and October 16, 2004 respectively. A total of 290 old gas cans were exchanged for new environmentally safe cans. **
- Co-sponsored with Richland County and SCDHEC a vehicle maintenance check event for National Car Care Month at South Carolina State Museum on April 1, 2006. Sixty vehicles were checked for proper maintenance.

18. Lexington County Comprehensive Plan-Adopted April 27, 1999

- Components of the Lexington County Comprehensive Plan encourage the development of traffic-intensive commercial, industrial and higher density residential land uses near existing major roads, railroads and interstate highways.
- It discourages low-density residential development near existing major roads and interstate highways and encourages development patterns such that future growth can be effectively served by public transportation.
- It also provides for safe transportation facilities for bike and pedestrian usage and promotes the compatibility of different land uses as an alternative to completely segregating residential, commercial, industrial, agricultural and other uses from one another.
- Another effort includes working within the Central Midlands Council of Governments to ensure that the Columbia Area Transportation Plan (COATS) assists in the reversal of the "sprawl" development pattern.

19. South Carolina Department of Education School Bus Funding

- The Department of Education has been awarded a Clean School Bus USA Grant for \$499,099 to retrofit some buses in South Carolina with diesel oxidation catalysts and crankcase filters, replace some older buses and conduct a biodiesel pilot and an idle-reduction device pilot.
- DHEC is working with SC Department of Education to obtain grants from EPA. State Education Superintendent Inez Tenenbaum signed an order on June 20, 2006 to buy 630 new school buses with roughly \$36 million appropriated by the Legislature. These buses should be on South Carolina roads by the end of the year. These new buses will replace vehicles from 1984 and 1985 which are not fuel efficient and produce higher levels of polluted emissions than more modern vehicles.
- The benefits from these South Carolina Department of Education (SDE) funding sources will be distributed throughout the state. The SDE has agreed to make York County and the five deferred areas the top priority in assigning new and retrofitted buses to service. SDE is also partnering with private companies and local school districts to provide specific funding for school bus retrofits and clean air programs.

20. Support efforts to create a regional air quality committee.

- Interest was expressed by the Lexington County Administrator in the County sending a joint letter with the Richland County Administrator to the Central Midlands Council of Governments. The letter would request that the COG take the lead in setting up a regional air quality committee. Efforts to include Newberry and Fairfield Counties will also be explored.
- The City of Columbia has created a Climate Protection Action Committee. The committee is charged with creating an action plan to reduce municipal greenhouse gas emissions and submit this plan to the City Council within 6 months. Lexington County is represented as an advisory member on the City of Columbia's Climate Protection Action Committee. The action plan that is developed by the Climate Protection Action Committee can serve as a basis for a regional air quality committee.

21. Outdoor Burning Ordinance

- The Lexington County Public Works and Public Safety Departments are working with SCDHEC to implement a no-burning ordinance in the County. County and DHEC personnel met on October 16 to come up with open burning regulations. The recommendations that were presented to County Council on October 24, 2006 were:

Exemptions:

- Vegetative debris burning related to forestry, wildlife and agricultural burns, as authorized by the state forestry commission
- Open burning in the connection with the preparation of food for immediate consumption, or campfires and fires used solely for recreational purposes, ceremonial occasions or human warmth that are done in a safe manner.
- Fires set for the purposes of training public fire-fighting personnel when authorized by the appropriate governmental entity. These will be exempt only if the drills are solely for the purposes of fire-fighting training and the duration of the burning is held to the

minimum required for such purposes. Prior approval is required only for sites which are not established training sites. (From Greenville County Ordinance)

Fires in a residential subdivision:

- The burning must be located not less than 500 feet from any structure and not less than 500 feet from the property line and adequate provision is made to prevent the fire from spreading within 50 feet of any structure.

Fires prohibited by the ban:

- Fires associated with the burning of debris on site by a licensed contractor during new construction of a home or other building.

Proposed open burning bans:

- 1. No burning is allowed except as listed in the exemptions at any time of the year.
- 2. No burning is allowed except as listed in the exemptions during the Ground Level Ozone Season of April 1-October 31 of each year.
- 3. No burning is allowed except as listed in the exemptions on days when the Air Quality Index for ground level ozone is a code orange (101 or greater/Unhealthy for Sensitive Groups)

These recommendations are proposed in an effort to lower limits of ground level ozone. It should be noted that more stringent standards may be considered at a later date if needed. Lexington County Council recommended that County staff and DHEC meet with the Homebuilders Association to discuss the possible ban on burning of debris by a licensed contractor. This meeting is scheduled for December 8, 2006.

22. Improve Traffic Congestion

- On July 31, 2006 the Central Midlands Regional Transit Authority announced they would offer free rides on their Smartride buses on Ozone Action Days.
- On October 2, 2006 the Town of Lexington approved spending \$14,000 for equipment needed to synchronize traffic lights to improve traffic flow on Columbia Avenue and Main Street. The Town will first monitor traffic at 20 intersections and the traffic lights will be timed based on the monitoring data. It is thought that this will reduce the congestion in this part of the town.

A. Control Measure under Consideration	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
Central Midlands, SC (Designated - Attainment)							
<p align="center">DECEMBER 2006 NEWBERRY COUNTY</p> <p align="center">Based on stakeholder consultation and taking into consideration resource and political constraints, the following emission reduction strategies remain under consideration. The County will continue to evaluate the air quality within the county and may implement one or more of the following measures under consideration.</p>							
Air Quality Contact	Tom Barber is County staff person responsible for air quality education/outreach and dissemination of ozone forecast.	Tom Barber will remain the contact person	Mar-03	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Support state-wide emission reduction efforts	County will offer support to DHEC for statewide emission reduction efforts such as open burning, and BACT	Completed. The county supported SCDHEC in the promulgation of the following regulations: SC61-62.2 "Prohibition of Open Burning" SC61-62.5 Std. 5.2 "Control of Oxides of Nitrogen:	Jun-04	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Web Site	County will include ozone numbers that are provided to county by DHEC	County has places several ozone awareness links on web page	June-05, Upon implementation by state	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
Public Works	Public Works Director will investigate the possibilities of using BIO-Diesel in county heavy equipment and trucks	Public Works Director is surveying possibilities of use	Prior to Dec-06	n/a directionally sound	n/a directionally sound	n/a	
Park and Ride	County will encourage Park and Ride Lots for those workers driving to Columbia each day	Park and Ride is used daily and attempts are being made to encourage others to use service	Dec-03	n/a directionally sound	n/a directionally sound	n/a	See Comment #3
<p>Comments:</p> <p>1. December 2004 - SC EAC SIP - activity not quantified for several reasons (first) in accordance with EAC Protocol, after all adopted Federal and State controls were accounted for in the modeling, it was determined that local controls were not necessary to demonstrate attainment of the 8-hour ozone standard. Measures were submitted by the local areas to show their continued support and commitment to the EAC process. (second) this activity is directionally sound and should provide air quality benefits and in some cases measurable results. The progress toward implementing this activity and the benefits derived will be documented as a part of the ongoing reporting requirements.</p> <p>2. December 2003 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac.html - additional information provided by the county to include "findings", "advantages/disadvantages", "recommendations", "costs", etc....</p> <p>3. March 2004 - Local Early Action Plan - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0304.asp</p> <p>4. June 2004 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0604.asp</p> <p>5. December 2004 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_1204.asp</p> <p>6. December 2004 - SC EAC SIP - Including Appendix 8 (Local Early Action Plans and the Air Quality Awareness and Improvement Policy) and Appendix 16 (County Level Emission Reductions and Descriptions for the Ozone EAC Areas) - See - http://www.scdhec.gov/eqc/baq/html/eap_sip.html</p> <p>7. April 20, 2005 - Correspondence to Mr. Palmer including clarifying supplemental information to the EAC SIP submittal of December 2004. - See - http://www.scdhec.gov/eqc/baq/html/eap_sip.html</p> <p>8. June 2005 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0605.asp</p>							

A. Control Measure Under Consideration	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
11 South Carolina State Measures							
Comments: Modeling for 2007, shows attainment without including measures beyond national and regional measures already finalized. 2012 and 2017 also shows attainment.							
11 Central Midlands, SC (Effective date of nonattainment designation deferred) Richland County							
Create a regional partnership to deal with air quality issues	Following a meeting with Myra Reece, Bureau Chief for SCDHEC's Bureau of Air Quality, on October 5, 2006, the Richland County Administrator began dialogue with the Lexington County Administrator to gauge Lexington County's interest in undertaking a regional approach to air quality issues, coordinated by the Central Midlands Council of Governments. Lexington County has expressed interest in a regional approach. A letter will be drafted to the COG in early 2007, and signed by the administrators of both counties.	While this measure is currently in the earliest stage, this represents a significant step forward in bringing both counties together in an effort to solve a regional issue on a regional level.	October 5, 2006, letter to be drafted early 2007				
Participation in Early Action Compact Summit	Richland County was the location for SCDHEC's first ever statewide Early Action Compact Summit on August 16 and 17, 2006. The conference was attended by over 200 participants. A number of information sessions were held on topics such as alternative fuels, education and outreach, and land use. A number of vendors were also on hand to promote energy saving and pollution-reducing technologies.	A number of county staff attended the summit, including the Research Manager/EAC Contact, Joe Cronin; Grants Manager, Audrey Schillflett; Fleet Manager, Bill Peters; and Planning Manager, Michael Criss. Many local leaders, such as the Mayor of Blythewood, Pete Amoth, were also in attendance.	August 16 and 17, 2006				
SCE&G SO2 Wet Scrubber for Wateree Station	SCE&G, Fossil-Hydro Generation, has initiated an Engineer/Procure/Construct (EPC) contract with Fluor Corporation to place into operation a single tower SO2 wet scrubber for Wateree Station. The current plan has both units at Wateree discharging the flue gases into a single wet SO2 scrubber tower. While SCE&G has not yet finalized the equipment supplier, they anticipate a wet SO2 scrubber optimal removal efficiency to be 92-98%. Based on 2005 SO2 emissions, and factoring in maintenance and operating conditions, a removal rate of approximately 40,000 Tons annually may be achievable. Until the final supplier is selected and actual performance information is measured on the completed project will we have confidence in the actual removal rate. Also, with the installation of the wet SO2 scrubber, a side benefit may be a reduction of mercury emissions; however, this possible reduction won't be determined until project completion and final testing.	Currently, this project is tentatively scheduled to start in 2007 and should be completed by early 2010.	To begin in 2007				
Free Showing of Kilowatt Ours: A Plan to Re-Energize America at USC	A free Showing of Kilowatt Ours: A Plan to Re-Energize America was held at USC on September 13, 2006. Director Jeff Barrie was on hand to lead a discussion after the showing on topics such as mountaintop removal mining, air pollution, global warming, childhood asthma, and mercury contamination.	Completed	September 13, 2006				
Columbia announced as one of four locations for hybrid bus demonstrations	Columbia was announced as one of four cities where a 37-passenger hybrid bus will be demonstrated. The local initiative was brought about by a partnership between USC, the S.C. Research Authority, and the Central Midlands Regional Transit Authority.	It is expected that the hybrid bus will be in operation by the time Columbia hosts the National Hydrogen Association's annual meeting in Spring 2009.	Operational by 2009				
City of Columbia signs Mayor's Climate Protection Agreement	On October 10, 2006, Mayor Bob Coble and the Columbia City Council signed the Mayor's Climate Protection Agreement, joining nearly 300 other cities nationwide who have also signed onto the agreement. By signing the agreement, the city has agreed to undertake methods designed to cut greenhouse emissions such as carbon dioxide and methane by 7 percent by the year 2012. Because of its pledge to reduce global warming and pollution, the South Carolina Chapter of the Sierra Club designated Columbia as a "Cool City."	Completed	October 10, 2006				
City of Columbia unveils eWaste Program	The City of Columbia has announced that beginning December 1, 2006, residents can turn in any electronic device, including unwanted radios, computers, televisions, appliances (except refrigerators), consumer electronics, etc. at a local drop off facility on Colonial Drive for recycling. All electronic devices will then be taken to an Aiken-based company, Global Recovery, to recycle.	Completed	December 1, 2006				
City of Columbia votes to protect two acres of trees	On October 18, 2006, the City of Columbia approved a plan that would allow Dreher High School to build new athletic facilities on a parcel of land near Owens Field Airport. Residents feared that two acres of trees would be lost under the school district's preferred option, however the city approved an option that would reconfigure an existing skateboard park in order to preserve the existing trees.	Completed	October 18, 2006				
City of Columbia initiates Climate Protection Action Committee	As an extension of its commitment to improving air quality, the City of Columbia initiated a Climate Protection Action Committee, commonly referred to as a "green committee." The committee is made up of a citizen's committee, comprised of council appointees, as well as an advisory committee, consisting of local air quality professionals, city staff, Richland and Lexington County EAC contacts, and DHEC representatives. The committee will be divided into several subcommittees, to study topics such as education and outreach, energy conservation, alternative fuels, and land use planning.	The committee will issue recommendations to City Council on ways that the city can reduce air and other types of pollution in early 2007 from the city's 56 buildings and fleet of 100 vehicles. The CPAC will also plan a community-wide summit, scheduled to take place in May 2007. The first CPAC meeting took place on November 30, 2006.	November 30, 2006				
Greater Columbia Fuel Cell Challenge	Six awards, totaling over \$150,000, were given to local organizations to spark the use of fuel cells in the Columbia area during the annual meeting of EngenuitySC. Awards included: • Segway Personal Transport Units for the University of South Carolina • A backup power system at Benedict College • A citizen's school for hydrogen and fuel cell technology • A hands-on exhibit at EdVenture Children's Museum • Portable batteries for television cameras at SC ETV • A first responders extended power pack for law enforcement and emergency officials The fuel cell challenge was project of the USC Columbia Fuel Cell Collaborative, which includes EngenuitySC, the University of South Carolina, the City of Columbia, and the S.C. Research Authority.	To be awarded	2006-2007				
Melting Pot of Columbia unveils fondue-powered vehicle	Jay Kilmartin, owner of a Columbia Restaurant, the Melting Pot, recently purchased and converted an old ambulance to run on used canola oil from the restaurant. The owner purchased the ambulance on eBay.com and converted it from diesel powered to vegetable oil powered. The vehicle now runs on used oils from fondue. The vehicle is painted in the restaurant's color scheme and features The Melting Pot logo and tagline on each side. The owners have been featured locally, as well as on national news and talk shows, such as the Glenn Beck Show. The ambulance has drawn attention to the use of alternative fuels both in the Columbia area, and around the U.S.	Completed	2006				
Emergency Funding for CMRTA System	In early 2006, Richland County Council was informed by the Central Midlands Transportation Authority that their transitional funding would run out at the end of the year, and if funding was not obtained by that time, service would be cut by up to 85% in Richland and Lexington Counties. The CMRTA provides a critical service in the Midlands, having provided approximately 2.6 million trips in FY 05-06.	After weighing several options, Richland County passed an ordinance in October to increase its road maintenance fees by 16 dollars for personal vehicles, and 24 dollars for commercial vehicles. The revenues from these fees, approximately \$7.5 million, will allow the bus system to maintain its current level of service until a permanent funding source is found.	October, 2006				
Richland County Transportation Study Commission	As part of its temporary funding solution to the CMRTA crisis, Richland County Council established a Transportation Study Commission to study public transit, road improvements, and walking and bicycle trails. The commission will study transportation issues that are regional in nature. As a result, members will be made up of appointments from Richland and Lexington County Councils, the City Councils in Columbia, Cayce, and West Columbia.	The 33 member commission is expected to release a final report in Spring 2008, as well as a recommendation for funding high-priority transportation projects.	2006-2008				
Automated vehicle location and tracking system	Richland County recently unveiled an Automated Vehicle Location system, which was highlighted in a recent article in the State newspaper. The system, resulting from a collaboration between the Fleet Manager, IT and GIS staff, will allow the county to track and monitor vehicles in the county fleet at any point in time. The system has safety, management, and air quality applications. Specifically, staff can track and monitor data obtained electronically to see if drivers are using the most economical routes on routine projects, thus reducing fuel costs and emissions from county vehicles.	Completed	2006				
Promotion of Arbor Day and related activities	Richland County Council declared November 25th through December 5th Arbor Day Week. Richland County Government staff and officials partnered with the Richland County Public Library, St. Martin de Pores school, the Governor's Office, the City of Columbia, State Forestry Commission, and the Congaree National Park to organize a variety of events. It has been a highly successful week, including a tree planting in honor of Richland County's 1st ever Arbor Day Baby. Organizations comprising the Midlands Arbor Day Committee were Richland County, City of Columbia, SC Budget and Control Board, Columbia Tree and Appearance Commission, Richland County Appearance Commission, Richland County Conservation Commission, Richland County Conservation District, Forestry Commission, USDA-Natural Resource Conservation Service, Congaree Land Trust, and the City of Forest Acres Appearance Commission.	The Midlands Arbor Day Committee hosted several events throughout the week of Saturday, November 25-December 5, 2006 in celebration of Arbor Day, which is Friday, December 1, 2006.	November and December 2006				

Lawnmower exchange survey and planning	As part of our planned lawnmower exchange (scheduled to take place in spring 2007), Richland County, Lexington County, and DHEC jointly crafted and distributed a lawnmower survey in October 2006. The survey went out to employees at each entity, neighborhood leaders, community organizations, and a link was posted on the Richland County website. The survey generated nearly 200 responses. These responses provide the necessary "market research" that will ensure that the event maximizes its success.	Completed	October 2006				
Ozone Action Days	The county received information from SCDHEC forecasting two Ozone Action Days in the summer of 2006 (June 22 and August 2, 2006.) Prior to each day, county staff send out emails to all county employees with the following message (a sample from the June 21 message):The following information was received from the SC Department of Health and Environmental Control: Air Quality Index for Thursday, June 22 ORANGE (104 AQI) - Unhealthy for Sensitive Groups Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion. **OZONE ACTION DAY for Midlands, Upstate and CSRA for Thursday** Monitor readings across the Upstate, Midlands and CSRA on Wednesday afternoon were indicating that very efficient ozone production conditions are currently place. With the overall weather pattern changing very little for Thursday, that is, with high pressure over the area at the surface and aloft, ground-level ozone production should once again be very efficient with the possibility that a monitor or two in the Upstate, Midlands and CSRA could peak in the code ORANGE category. There are many things you can do to limit air pollution on ozone action days and throughout the year. To learn more about ozone, and for For additional information concerning the air quality forecast, please visit the South Carolina Department of Health and Environmental Control.	Completed	Ozone Season 2006				
Northeast Richland Traffic and Road Improvement Meeting	On December 6, 2006, Councilwomen Val Hutchinson and Joyce Dickerson held an informational meeting with residents and leaders from the rapidly growing Northeast area of Richland County. The meeting included a presentation by Norm Whitaker, head of the Central Midlands Council of Governments, regarding the transportation priorities and funding mechanisms for roads in the Northeast. Mr. Whitaker explained the correlation between congestion, growth, and air quality in the Northeast, and informed attendees that that ozone monitor located at Sandhill has the potential to draw the entire two-county region into non-compliance. The committee resolved to meet on a quarterly basis in an effort to centralize the often fractured discussion of transportation needs on this rapidly growing area of the county. Councilwomen Dickerson and Hutchinson also received suggestions from the group as to how Council can better plan for transportation needs in the Northeast, including accelerating an update of the county's comprehensive plan, as well as a comprehensive countywide transportation plan.	Completed	December 6, 2006				
City of Forest Acres Considering Switching to Biodiesel	In September 2006, Forest Acres city administrator, Mark Williams, informed members of city council that he was interested in using B20 biodiesel as an alternative to diesel in the city's fleet of vehicles. The switch is expected to cost approximately \$13,000 initially, however, this would provide the city with a cleaner, renewable, and domestically produced fuel alternative. The city has eighteen vehicles, including trash loaders and recycling trucks. If Forest Acres makes the switch, it would join the city of Columbia (which is experimenting with biodiesel in two trucks, with the possibility of expanding that to about 300 diesel vehicles) and the city of Cayce, which is using biodiesel in 30 vehicles without substantial cost or maintenance issues.	Under Consideration	2006				
Memorandum of Agreement 9/27/04 with SCE&G Wateree	Facility agreed to take permit limits on two coal-fired boilers during the ozone season as their commitment to the EAC process. NOx emissions from any boiler equipped with selective catalytic reduction systems (SCR) are not to exceed 0.15 lbs/MMBtu averaged over a 5-month period.	An MOA was signed with the SCE&G Wateree facility in which the facility agreed to take permit limits on two coal-fired boilers during the ozone season as their commitment to the EAC process. NOx emissions from any boiler equipped with selective catalytic reduction systems are not to exceed .15lbs/MMBtu averaged over a 5-month period. This agreement went into effect on September 27, 2004.	September 27, 2004		Limits to .15 lbs / MMBtu average from SCR equipped boilers during the ozone season		See Comment #6.
Memorandum of Agreement 8/12/04 with International Paper	Facility agreed to take an annual allowable NOx emission reduction of 1,000 tons at the Eastover Mill Facility. The Title V permit (#1900-0046) for the Eastover Mill provides for allowable NOx emissions totaling 5,155 tons per year. The facility-wide annual allowable NOx emission reduction will reduce allowable NOx emissions at the Eastover Mill from 5,155 to 4,155 tons per year.	The Eastover facility has utilized the "best available control technology" on all of their NOx and VOC emission units at the time of initial installation, and subsequently as part of any significant modification. The power boilers at the Eastover Mill produce low NOx emission levels because of both their design (e.g. tangential firing) and fuel type (e.g. waste wood). One power boiler at the Eastover Mill is covered under the "NOx SIP" and is expected to have emission levels well below their current allocation. An MOA was signed with International Paper in which the facility agreed to take an annual allowable NOx emission reduction of 1,000 tons at the Eastover Mill facility. The Title V permit for the Eastover Mill provides for allowable NOx emissions totaling 5,155 tons/year. The facility-wide annual allowable NOx reduction will reduce allowable NOx emissions at the Eastover Mill from 5,155 to 4,155 tons/year. This agreement went into effect on August 12, 2004.	August 12, 2004		1,000 tons allowable NOx limit		See Comment #6.
Biodiesel Buses at the University of South Carolina	The University of South Carolina, located in Richland County, has begun using 80/20 biodiesel to fuel several of its shuttle buses. The program began with a grant from the DOE to offset the marginal cost of biodiesel fuel, and benefitted from the long-term loan of a tank from United Energy.	The University of South Carolina, located in Richland County, has begun using 80/20 biodiesel to fuel several of its shuttle buses. The program began in 2002 with a grant from the DOE to offset the marginal cost of biodiesel fuel, and benefitted from the long-term loan of a tank from United Energy. DHEC estimates that this program will result in a reduction of 12 lbs of VOC's per year, 25 lbs of NOx per year, and 34 lbs of CO per year.	completed	25 lbs/ year	12 lbs/ year	CO reductions 34 lbs/year December 2004 EAC SIP - Appendix 16 See Comment #6	See Comment #6.
University of South Carolina Ethanol Project	The University of South Carolina, located in Richland County, has begun replacing regular gasoline vehicles with alternative, flexible-fuel vehicles, and has installed E85 infrastructure to supply those vehicles. (Other smaller gasoline-powered vehicles have been replaced with electric vehicles.)	The University of South Carolina, located in Richland County, has begun replacing regular gasoline vehicles with alternative, flexible-fuel vehicles, and has installed E85 infrastructure to supply those vehicles. (Other smaller gasoline-powered vehicles have been replaced with electric vehicles.) DHEC estimates that this program will result in a reduction of 18.9 lbs of VOC's per year, 18.3 lbs of NOx per year, and 1250 lbs of CO.	completed	18.3 lbs/ year	18.9 lbs/ year	CO reductions 1250 lbs/year December 2004 EAC SIP - Appendix 16 See Comment #6	See Comment #6.
SCDHEC flex fuel vehicles.	SCDHEC has a number of flex fuel vehicles that run almost exclusively on E85. SCDHEC uses approximately 23,500 gallons of E85 annually. Not all of the reduction in travel occurred in Richland County.	The use of flex-fuel vehicles has resulted in the displacement of approximately 23,500 gallons of gasoline annually. ** DHEC estimates that this program will result in a reduction of 104 lbs/yr of VOC's, and 103 lbs/yr of NOx and 6,030 lbs/yr of CO.		104 lbs/yr	103 lbs/yr		CO reductions 6030 lbs/year December 2004 EAC SIP - Appendix 16 See Comment 6

Take a Break from the Exhaust program, SCDHEC	Employees participate by choosing pollution-reducing alternatives to commuting alone to work during the ozone season from May 1 - September 30. Emissions are calculated for vehicle miles eliminated. Not all of the reduction in travel occurred within Richland County.	"Take a Break from the Exhaust" runs during the ozone season and reduces the number of miles traveled in Richland County. ** DHEC estimates that these programs will result in a reduction of 568 lbs of VOC's per ground level ozone season, 393 lbs of NOx per ground level ozone season and 5,494 lbs of CO per ground level ozone season.		568 lbs/ ozone season	393 lbs/ozone season		CO reductions 5,494 lbs/year December 2004 EAC SIP - Appendix 16 See Comment #6
Public Ethanol (E85) refueling station	1. On October 6, 2004, the county's first publicly accessible E85 refueling station in downtown was opened. Estimated annual reduction based on first 64 days. 2. Richland County is considering reapplying for ethanol fueling sites from DHEC.	3. There are currently eight E85 stations in the midlands area, including 6 in Richland County, 2 in Lexington County.	October 6, 2004	1. 162 lbs	1. 621 lbs.		1. CO reductions 2,369 lbs/year December 2004 EAC SIP - Appendix 16 See Comments #4, #6
"Smart Ride"	County employees and visitors to Richland County from the Camden, Sumter, and Newberry/Chapin areas are encouraged to ride SmartRide, a park and ride service offered by SCDOT.	SmartRide is a park and ride service offered by SC Department of Transportation, and offers service between Columbia and outlying Camden, Sumter and Newberry. County employees and visitors to Richland County from the Camden, Sumter, and Newberry/Chapin areas are encouraged to ride SmartRide.	SmartRide began in Fall 2003 and continues today	153 lbs.	207 lbs.		CO reductions 3,166 lbs/year December 2004 EAC SIP - Appendix 16 See Comment 6
South Carolina Department of Education	The benefits from these South Carolina Department of Education (SDE) funding sources will be distributed throughout the state. The SDE has agreed to make York County and the five deferred areas the top priority in assigning new and retrofitted buses to service. SDE is also partnering with private companies and local school districts to provide specific funding for school bus retrofits and clean air programs.	The Department of Education has been awarded a Clean School Bus USA Grant for \$499,099 to retrofit some buses in South Carolina with diesel oxidation catalysts and crankcase filters, replace some older buses and conduct a biodiesel pilot and an idle-reduction device pilot. State Education Superintendent Inez Tenenbaum signed an order on June 20, 2006 to buy 630 new school buses with roughly \$36 million appropriated by the Legislature. These buses should be on South Carolina roads by the end of the year. These new buses will replace vehicles from 1984 and 1985 which are not fuel efficient and produce higher levels of polluted emissions than more modern vehicles.	2006				
Lawnmower Exchange Event	Working with Lexington County, DHEC, and other sponsors, Richland County is currently planning a lawnmower exchange event to be held in the Spring of 2006. During the event, citizens will be able to turn in an old gasoline-powered engine in exchange for a discount on a new, electrically-powered lawnmower. This event will be the first held in the State of South Carolina.	To be held in the Summer of 2006.	To be completed in Summer 2006	TBD	TBD		
Kerosene Container Exchange Event	Working with Lexington County, DHEC, and other sponsors, Richland County is currently planning a kerosene container exchange event to be held in 2006.	Currently planning for 2006-07 exchange.	To be completed in 2006-07	TBD	TBD		
Promote Bicycling and Pedestrian Strategies as an Alternative to Driving	Columbia Cycle Summit	A Columbia Cycle Summit was held on Friday May 12, 2006 at EdVenture in Columbia. Andy Clarke, Executive Director of the League of American Bicyclists, was the keynote speaker. The workshop's goal was to develop an action plan for the city in order for Columbia to be designated as a bicycle friendly community by the league.	Completed	NA	NA		
	Bicycle and pedestrian Pathways Plan	On May 13, 2006, the Central Midlands Council of Governments unveiled a proposal, known as the Bicycle and Pedestrian Pathways Plan, which calls for 26 cycling projects to be completed in and around the City of Columbia in the next two years. Included in the plan are new bike lanes on area roads, as well as new lanes on an abandoned rail line.	Proposal Completed, implementation is pending funding.	NA	NA		
	Broadcast of "Bicycle/Pedestrian Planning Strategies" at USC	The USC Prevention Research Center and the SC Department of Transportation invite held a live broadcast of "Bicycle/Pedestrian Planning Strategies: From SAFETEA-LU to Safe Routes to School" on May 4, 2006, from 1:00 to 4:00 pm, EDT, at the Moore School of Business.	Completed	NA	NA		
Expand E-Government	Richland County has greatly expanded its e-government options. Using e-government to allow citizens to make tax payments, download forms, view maps, and have their questions answered will allow for fewer trips to the county administration building.	Online tax payments, online business license payments, online forms database, online GIS mapping application.	Completed, with continuing upgrades.	NA	NA		
Santee Cooper's Green Power Generating Station	Santee Cooper's third "green power" generating station began operation in Richland County on April 6, 2006. The \$8.5 million facility is located at Waste Management's Richland County landfill near Elgin. Methane gas produced by decomposing waste at the 124-acre landfill fuels a 5.5-megawatt gas-turbine generator.	The voluntary "green power" program is offered to residential customers in blocks of 100-kilowatt-hours each. Because it costs more to produce "green power" than by conventional means, a \$3 premium is charged on a customer's monthly electric bill.	Completed	NA	NA		
School Bus Retrofit Project (SCDOE)	Approximately 21 diesel buses will be retrofitted with particulate filters during 2006. (South Carolina Department of Education. Additional reductions of PM are also expected)	The school buses may not be retrofitted until 2007 when ultra-low sulfur diesel is more widely available since the retrofitting technology being applied works best with this new fuel type. The Environmental Protection Agency's ultra-low sulfur diesel fuel requirements went into effect on June 1, 2006. Ultra-low sulfur diesel fuel will be available at retail stations beginning summer 2006.	2006	357 lbs/year	n/a		CO reductions 2,499 lbs/year December 2004 EAC SIP - Appendix 16 See Comment #6

<p align="center">DECEMBER 2006 RICHLAND COUNTY</p> <p align="center">Based on stakeholder consultation and taking into consideration resource and political constraints, the following control measures are under consideration pending modeling that demonstrates compliance in 2007 by SCDHEC. It is anticipated these measures under consideration will assist the Counties of Richland and Lexington, South Carolina, in achieving and/or maintaining the 8-hour ozone standard by 2007.</p>							
EARLY ACTION COMPACT EMISSION REDUCTION STRATEGIES							
1. Assign a County Air Quality Contact (Also measure 15)	The County Administrator has assigned a staff person to be responsible for all air quality education and outreach activities, and to insure dissemination of the ozone forecast.	Current Air Quality Contact: Joe Cronin, Research Manager	March 1, 2003	NA	NA	.25 FTE	See Comment #2 and #6
2. Gas Can Exchange Events	1. Events held on June 5 and October 16, 2004.	completed	June 5 and October 16, 2004	475 lbs/year			See comment #4, #6
3. Support SCDHEC's statewide efforts to reduce ozone levels	Richland County will offer support to DHEC for statewide emission reduction efforts such as restrictions on open burning, and BACT.	December 2004 EAC SIP did include Appendix 16 - 1. SC61-62.2 "Prohibition of Open Burning" regulation with reductions for 2007 calendar year - reductions expected during the ozone season for residential construction waste. 2. SC61-62.5, Std. 5.2 "Control of Oxides of Nitrogen" reduction amount for both existing and new sources combined across Lexington and Richland counties for 2007 calendar year.	1. June 25, 2004 2. June 25, 2004	54.16 tons/season NA	11.40 tons/season 183.5 tons/yr		See comment #2 and #6
4. Promote Land Use Planning	Through Richland County's new Land Development Code, the county has altered its zoning regulations, design controls, and "green development" practices in an effort to promote smart, sustainable growth, which will aid in improving air quality throughout the county and region. Updates to the code are designed to address the following areas: 1. To provide for adequate light, air, and open space; 2. To prevent the overcrowding of land to avoid undue concentration of population and to lessen congestion in the roads; 3. To facilitate the creation of a convenient, attractive, and harmonious community; 4. To protect and preserve scenic, historic, cultural, or ecologically sensitive areas; 5. To regulate the density and distribution of populations and the uses of buildings, structures and land for trade, industry, residence, recreation, agriculture, forestry, conservation, airports and approaches thereto, water supply, sanitation, protection against floods, public activities and other purposes; 6. To facilitate the adequate provision or availability of transportation, police and fire protection, water, sewage, schools, parks and other recreational facilities, affordable housing, disaster evacuation, and other public services and requirements as are set forth in this chapter; 7. To secure safety from fire, flood, and other dangers; 8. To encourage the development of an economically sound and stable county; 9. To assure the timely provision of required roads, utilities, and other facilities and service to new land developments; 10. To assure the adequate provision of safe and convenient traffic access and circulation, both vehicular and pedestrian, in and through new land developments; 11. To assure the provision of needed public open spaces and building sites in new land developments through the dedication or reservation of land for recreational, educational, and/or transportation purposes; 12. To assure, in general, the wise and timely development of new areas, and redevelopment of previously developed areas in harmony with the comprehensive plans of Richland County and its municipalities; 13. To assure compatibility between neighboring properties and adjacent zoning districts; and 14. To further the public welfare in any other regard specified by the Richland County Council.	The new Land Development Code went into effect on July 1, 2005.	July 1, 2005	NA	NA		The County's new Land Development Code is available online at: http://www.rcgov.us/information/town/LandDevelopmentCode110904.pdf
5. Join and participate in the SC Early Action Plan for 8-hour ozone.	Given its non-attainment status under the new 8-hour ozone standard, Richland County is actively participating in the South Carolina Early Action Program in an effort to promote cleaner air sooner through the implementation of various emission reduction strategies.	The county remains committed to the EAP and the emission reduction strategies listed below. Preliminary data shows that for the first time since the new federal standard went into effect, the three-year average of fourth highest ozone concentrations at each of the three ozone monitors located in Richland County now meet the tougher standard.	County Council agreed to participate in December 2002. The process continues until 2007.	NA	NA		See Comment #2 and #6
6. Industry Advisory Panel	Richland County seeks to create a forum by which local industries can communicate new ideas, and inform each other of the strides each has made in ozone reduction. This panel will focus on industries emitting the highest amounts of VOCs and NOx, but all Richland County industries and other interested parties will be invited to participate. Form a group representing stationary NOx sources in the county to share best practices, share technical resources in the county and pursue targeted NOx reductions. This group could review emission inventories and modeling data to identify stationary sources with significant impact on ozone air quality. This group could also share best practices for NOx control technology and technical/engineering resources and encourage NOx reductions to support ozone attainment.	Attempts to assemble an advisory panel have been met with little interest.	This initiative is currently on hold pending further interest.				
7. Replace gasoline golf carts with electric carts	Richland County has researched the possibility of purchasing electric golf carts for county fleet. The County currently has 4 golf carts, all of which use gasoline. Electric carts are lower maintenance and lower cost, and parts are also easier to get, thus providing more of an incentive to purchase electric carts in the future.	There are currently no plans to replace existing gasoline golf carts with electric. As carts are replaced as needed, electric carts will be preferred over gasoline if practicable.	Emphasis place the next time a golf cart is purchased.	NA	NA		See Comment #2 and #6
8. Assist with establishing alternative fuels for public fleets.	Under an administrative policy, Richland County has a goal of replacing 30% of its fleet by 2010 with the lowest emission vehicles practical. Under this policy, the county continues to pursue flexible fuel, alternative fuel, and hybrid vehicles for its fleet. Flexible and Alternative Fuel Vehicles 1. The county has purchased approximately two dozen flexible fuel (E85/Gasoline) vehicles for its public fleet. More flexible fuel vehicles will be purchased in future years as funding and availability under the state contract permits. 2. The Central Midlands Regional Transportation Authority (CMRTA) has 7 compressed natural gas (CNG) buses in its fleet, with the remaining vehicles operated by the "clean diesel" technology. CMRTA used 60,031 gallons of CNG during 2004. 3. County staff, in conjunction with DHEC and the Palmetto State Clean Fuels Coalition, continues to research and consider the possibility of using other alternative fuels, such as biodiesel. To become more familiar with available alternatives to gasoline, staff has attended all Clean Cities meetings, along with special events, such as the coalition's Biofuels Showcase, held in Columbia on November 18, 2005 4. The county, in conjunction with DHEC, continues to pursue grant funds to convert existing vehicles to alternative fuel, to purchase new alternative fuel vehicles, and to install the needed infrastructure to service alternative fuel vehicles. a. CNG Vehicles Grant Application b. Diesel Retrofit Grant Application c. E85 Fueling Infrastructure Grant Application	2004 (Unfunded) 2004 (Unfunded) 2005 (Unfunded)	Unfunded Unfunded Unfunded	NA NA NA	NA NA NA		See Comment #2 and #8

	Hybrid Vehicles 1. Staff has researched the practicality of replacing traditional fleet vehicles with hybrid vehicles. 2. For the first time, the state contract has included a Chevrolet 1500 hybrid pickup truck. The county's fleet manager and other members of staff met with the vendor on December 13, 2005 to test drive and learn more about the vehicle. To date, the county has purchased 8 of these hybrid vehicles, each of which will receive approximately 12% better fuel efficiency, and release 1600 fewer pounds of emissions into the air each year than the traditional pickup.	Purchases expected in FY 2005-06	Completed Completed April 2006	NA 1600 lbs less total emissions per vehicle per year.		
9. Implement a program to foster ozone awareness and to educate and motivate individuals to take actions to minimize ozone pollution.	Richland County is committed to promoting ozone awareness, both internally and externally. By using the measures listed below, the County has sought to educate residents about the harmful effects of ozone, and the everyday steps they can take to improve air quality and reduce ozone in Richland County.					See Comments #2 #6 and #8 for additional information.
	1. Place SCDHEC's Daily Air Quality Index on the County Website.	A link appears on the County's main page, www.rcgov.us. DHEC updates the index on a daily basis during the ozone season.	Began Spring 2005	NA	NA	
	2. Place air quality related informational and educational items on the County's website.	A link appears on the County's main page for information on the Ozone EAP, http://www.rcgov.us/information/ozone/home.asp. The page includes information about the County's plan, progress reports, links to informational websites, and electronic versions of educational fliers and brochures.	Completed, replacing materials as needed	NA	NA	
	3. Issue press releases and promote news coverage of the county's ozone-related events and initiatives.	The Ozone Coordinator, working in conjunction with the Public Information Office, frequently issues press releases and offers media interviews to promote ozone awareness and to highlight county initiatives.	Completed, with continuing releases as needed	NA	NA	
	4. Actively participate in Ozone Awareness Week	The county actively participated in Ozone Awareness Week.	Completed March 28, through April 1, 2005	NA	NA	
	5. Place informational posters in the County Administration Building.	Informational posters appear in the lobby of the building, directly across from the Treasurer's Office, where residents come to pay vehicle and other taxes.	Placed in the lobby in Spring 2005 and remains there indefinitely.	NA	NA	
	6. Place informational brochures and fliers in the County Administration Building.	Informational brochures and fliers appear in the lobby of the building. The supply is restocked as needed.	Completed, replacing materials as needed	NA	NA	
	7. Encourage mass transit and other transportation alternatives.	Employees are encouraged via email to use mass transit by e-mail. A poster is currently being developed to be placed in the lobby to advertise bus service and the SmartRide Program.	Completed, with continuing reminders	NA	NA	
	8. Keep county employees updated on air quality issues by email regularly.	The county's Ozone Coordinator frequently e-mails county staff regarding air quality issues. E-mails in 2005 included updates on forecasted ozone action days, information on the availability of E85 and other alternative fuels, a list of things you can do to improve air quality, and car maintenance tips to improve fuel efficiency and lower emissions.	Completed, with continuing reminders	NA	NA	
	9. Actively participate in Earth Day Events	SC DHEC held Earth Day festivities on April 22 at the SC State Museum, located in Richland County. Other events corresponding with the event were held, including an alternative fuels display at Earth Fare, a local health food store.	Completed	NA	NA	
	10. Actively participate in Car Awareness Week	Richland County was a participant in DHEC's Car Care Awareness Week activities. A segment of the county's television show was dedicated to promoting the event, and staff was on hand to assist.	Completed	NA	NA	
	11. Use the county's new television show, Richland Revealed, to promote ozone awareness.	Richland County has entered into an agreement with the local WB station to broadcast Richland Revealed at 11:30 am on Sunday mornings. An episode of the show to be dedicated to air quality is planned for the spring of 2006. This episode will highlight the importance of clean air, and promote steps that can be taken to reduce pollution.	Completed, with continuing updates	NA	NA	
10. Meet with representatives of other metropolitan areas that have implemented programs to learn from experiences.	Frequently survey or work in conjunction with other jurisdictions to discuss initiatives or events that might be adapted for use in Richland County. Actively engaging in Clean Cities, which has stakeholders from other counties, municipalities, and state agencies, as well as the private and non-profit sector. Work with non-profit organizations on air quality and environmental-related issues. Clean Air Report briefing was held for members of Richland County and Columbia City Council. 1. The "Clean Air Report for the Columbia Area" was issued by the Southern Environmental Law Center. Staff members regularly interact with SELC staff. 2. Partnership with Keep the Midlands Beautiful and other local organizations on special projects.	Valuable research on hybrid vehicle use and lawnmower exchange projects has been obtained using such collaboration. Staff has obtained a greater understanding of alternative fuels and their implications for cleaner air by attending Clean Cities meetings and events.	Began Spring 2003, with continuing dialogue Completed	NA	NA	See Comments #2 #6 and #8
11. Offer compressed work weeks or flexible schedules to County employees	Many Richland County employees operate on a flex schedule. We hope to expand this program to other departments where feasible (excluding most emergency services employees.) The implementation of compressed work weeks and flex time helps reduce traffic congestion during the peak driving hours by spreading out the number of vehicles on the roadway over a longer period of time.		Completed, with future expansion as needed.	NA	NA	See Comment #2 and #6
12. Encourage carpooling, vanpooling, and mass transit as an alternative to single passenger trips	County employees and visitors to Richland County from the Camden, Sumter, and Newberry/Chapin areas are encouraged to ride SmartRide, a park and ride service offered by SCDOT. County employees and visitors to Richland County are encouraged to use the Central Midlands Regional Transportation Authority's bus system. In 2004, the County Ozone Coordinator undertook a survey of county employees to gauge interest in car-pooling initiatives. With the recent increase in gas prices, the Ozone Coordinator has begun researching new park-and-ride and car-pooling initiatives.	The number of SmartRide riders has increased substantially since its inception. SCDOT now offers free trips on Ozone Action Days. Unfortunately, county employees expressed little interest in car-pooling initiatives. Research has been done as to which zip codes county employees are coming from. A pilot park-and-ride program is expected to begin in Spring 2006. If successful, the program will expand to other areas of the region.	SmartRide began in Fall 2003 and continues today Completed, with continuing reminders Completed Spring 2004 Research was undertaken in Summer 2005. A pilot program may begin with future interest.	NA	NA	See Comment #2 and #6
13. Join and participate in Clean Cities	Richland County signed on as a stakeholder in the Palmetto Clean Fuels Coalition (which is now Clean Cities) on July 22, 2003. The county joined the coalition in an effort to seek ways to increase the availability of alternative fuels in our county, to increase the use of those fuels, and to increase public awareness of the benefits of using alternative fuels. Richland County sends a representative to all Clean Cities meetings.	Richland County remains a stakeholder in this organization, and continues to send a representative to all coalition meetings. With the assistance of the coalition, there are now six service stations that offer E85 to the public in Richland County.	July 22, 2003	NA	NA	See Comment #2 and #6
14. Develop City and County Energy Conservation Plan	Richland County currently promotes internal recycling in the administration building, as well as other county-owned buildings. Recycling bins are placed throughout the building, ranging from white paper to aluminum can receptacles. We remind employees to turn off lights and computers when not in use. Council is currently considering the possibility of hiring an energy conservation consultant to survey county buildings for inefficiencies and to plan for financing any needed upgrades to county facilities.		Completed, with continuing reminders Pending Council action	NA	NA	See Comment #2 and #6

15. Assign Staff to become air quality contact/expert for jurisdiction	The staff member assigned as air quality contact is also the expert for the jurisdiction.	Please see Measure 2, Assign a county air quality contact.	Completed in 2003				
16. Encourage Mass Transite (transportation choices and alternatives)	All Richland County citizens have access to mass transit.	Use of mass transit is specifically encouraged for county, city and state employees. Palmetto Health Richland and Baptist are the first and second largest users of the bus system respectively. Since education and awareness foster ozone awareness and to educate and motivate individuals to take actions to minimize ozone pollution" section g. foster use of public transit, this measure has been included as part of measure 9.	Completed and continuing with reminders.				
17. Encourage not overfilling fuel tank	Stop when the nozzle clicks off.	This information is contained on fliers that are posted throughout county departments. The flier is also online, and available to the public.	Completed in 2003 and continuing				
18. Restrict mowing days and times all year, especially during ozone season / ozone action days. Promote the use of electric and propane lawn mowers.	Per the Richland County Administrator's directive, all mowing and the use of gas-powered lawn equipment on County property should be restricted on Ozone Action Days (orange and above), when manageable. In addition, the County will seek to landscape facilities in ways that reduce equipment use, thereby requiring lower maintenance, and resulting in fewer emissions.		Effective - October 8, 2004	NA	NA		See Comment #2 and #6
19. Consider Tree Planting/landscaping standards.	Planted trees reduce the need for air conditioning, reduce the heat island effect in urban areas, and reduce energy usage. Tree ordinances could be drafted to establish minimum tree planting standards for new development; and to promote strategic tree planting, street trees, and parking lot trees.	Landscaping standards are included in the Land Development Code. Tree ordinances have been drafted to establish minimum tree planting standards for new development, and to promote strategic tree planting, street trees, and parking lot trees. Stringent specifications are laid out in this section along with repercussions for not abiding by these standards. The Land Development Code's proposed implementation date is January 1, 2005. The Planning Commission transmitted its recommended draft of the Land Development Code to the County Council on 12/31/03 and the Landscaping Standards, Section 26-176 on 2/13/04. The New Land Development Code - Effective 7/1/05 - revised 11/9/04 is available online at: http://www.richlandonline.com/information/town/LandDevelopmentCode110904.pdf Landscaping Standards, Section 26-176 is located on pages 254 through 270.	Completed. New Land Development Code effective 7/1/05.				
20. Reduction of VOC emissions and Reduction of NOx Emissions at International Paper Eastover Mill	MOA was signed with International Paper in which the facility agreed to take an annual allowable Nox emission reduction of 1,000 tons at the Eastover Mill facility. The Title V permit for the Eastover Mill provides for allowable NOx emissions totaling 5,155 tons/year. The facility-wide annual allowable NOx reduction will reduce allowable NOx emissions at the Eastover Mill from 5,155 to 4,155 tons/year. (See Comment #6 for specific information regarding reductions.)		August 12, 2004	NA	1,000 tons/year		See information above. See Comment #6 for specific information regarding reductions
21. Reduction of Nox emissions at SCE&G's Wateree Plant	MOA was signed with the SCE&G Wateree facility in which the facility agreed to take permit limits on two coal-fired boilers during the ozone season as their commitment to the EAC process. Nox emissions from any boiler equipped with selective catalytic reduction systems are not to exceed .15lbs/MMBtu averaged over a 5-month period. (See Comment #6 for specific information regarding reductions.)		September 27, 2004	NA	Emission Limit of .15lbs/MMBtu during the ozone season.		See information above. See Comment #6 for specific information regarding reductions
22. Prohibit/limit/ban open burning (all year or May – September or on Ozone Action Days); encourage to mulch clearing debris rather than burning it.	Richland County's Code of Ordinances prohibits all fires within the right-of-way of any street, road, or highway except in certain cases. Open fires may be set in performance of an official duty of any public officer when deemed necessary to protect property, life, or the public welfare. Salamanders or other devices may be used for heating by construction or other workers, provided no nuisance is created. Open burning is prohibited within any "residential" zoning district (with a few exceptions). During a pollution alert declared by duly constituted authority, any and all open burning shall be unlawful.	Codified in Richland County Code of Ordinances, Section 10-1.	Completed, with continuing enforcement	54.16 tons/season	11.4 tons/season		See Richland County Code of Ordinances, Section 10-1, available online at: http://www.amlegal.com/richlandco%5Fsc/
RICHLAND COUNTY AIR QUALITY IMPROVEMENT POLICY - ADMINISTRATOR'S DIRECTIVE							
Air Quality Awareness and Improvement Policy	An Administrative Directive, issued October 8, 2004, for the purpose of establishing policies by which air quality and awareness will be improved via recurring activities of County government. Details of the policy include: 1. Ensure that all employees continue to be notified of upcoming ozone action days. Notification occurs via email. 2. Departments allowed to promote flex-scheduling where feasible. Certain employees in emergency services departments are unable to practice flex-scheduling, but other operational departments are allowed to promote this option where manageable. 3. Richland County has several Tier II compliant vehicles and pieces of equipment currently in its fleet and will increase this number. Richland County had budgeted for 13 alternative fuel vehicles (AFVs) in FY 2004-2005, with an increase in the purchasing of AFVs thereafter. It shall be the goal of the County that by 2010, 30% of the County fleet will be the lowest emission vehicles practical. 4. All County vehicles and equipment are operating according to the manufacturer's specifications, and shall continue to do so. Richland County currently uses recyclable oil filters with an extended service interval capacity, which allows the county to perform oil changes at 4,000 or 5,000 miles instead of 3,000. Richland County seeks to incorporate synthetic oils and fluids in its maintenance program, which offer superior protection and longer service intervals. 5. Drivers are required to eliminate vehicle idling. Exceptions include emergency vehicles, traffic/weather conditions, and vehicles being repaired, maintained, or inspected. These exceptions should occur only as reasonably required for specific operations. 6. Restrict mowing and use of gas-powered lawn equipment on County property on Ozone Action Days (orange and above) where manageable. 7. The County will seek to landscape facilities in ways that reduce equipment use, thereby promoting lower maintenance, resulting in fewer emissions. 8. During a pollution alert, such as an ozone action day, all outdoor burning shall be unlawful. (See Richland County Ordinance Chapter 10, Section 10-1.) 9. Richland County will continue to practice energy conservation in all County facilities. Conservation measures include turning off lights and computers on nights, weekends, and on holidays. Strong emphasis and preference will be placed on purchasing Energy Star compliant products. 10. Recycling efforts shall remain ongoing at County facilities. SEE Comment #6	Ongoing	Effective - October 8, 2004	NA	NA		See comment #6
Comments: 1. December 2004 - SC EAC SIP - activity not quantified for several reasons (first) in accordance with EAC Protocol, after all adopted Federal and State controls were accounted for in the modeling, it was determined that local controls were not necessary to demonstrate attainment of the 8-hour ozone standard. Measures were submitted by the local areas to show their continued support and commitment to the EAC process. (second) this activity is directionally sound and should provide air quality benefits and in some cases measurable results. The progress toward implementing this activity and the benefits derived will be documented as a part of the ongoing reporting requirements. 2. December 2003 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac.html - additional information provided by the county to include "findings," "advantages/disadvantages," "recommendations," "costs," etc.... 3. March 2004 - Local Early Action Plan - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0304.asp 4. June 2004 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0604.asp 5. December 2004 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_1204.asp 6. December 2004 - SC EAC SIP - Including Appendix 8 (Local Early Action Plans and the Air Quality Awareness and Improvement Policy) and Appendix 16 (County Level Emission Reductions and Descriptions for the Ozone EAC Areas) - See - http://www.scdhec.gov/eqc/baq/html/eap_sip.html 7. April 20, 2005 - Correspondence to Mr. Palmer including clarifying supplemental information to the EAC SIP submittal of December 2004. - See - http://www.scdhec.gov/eqc/baq/html/eap_sip.html 8. June 2005 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0605.asp							

Richland County, South Carolina
Local Early Action Compact Measures

Prepared by Joe Cronin

In an effort to keep our contact information updated we have provided the following information for the county:

	Name	Telephone	E-mail Address
County Administrator	Milton Pope	(803)576-2058	miltonpope@richlandonline.com
EAC contact	Joe Cronin	(803)576-2066	joecronin@richlandonline.com

Based on stakeholder consultation and taking into consideration resource and political constraints, the following control measures are under consideration pending modeling that demonstrates compliance in 2007 by SCDHEC. It is anticipated these measures under consideration will assist the County of Richland, South Carolina, in achieving and/or maintaining the 8-hour ozone standard by 2007.

1. Assign a county air quality contact

Description of Measure

The Richland County Ozone Coordinator is responsible for all air quality education and outreach activities, and to insure the dissemination of the ozone forecast. The Ozone coordinator also works with SCDHEC and other parties on air quality issues relevant to Richland County.

- The Richland County Administrator assigned a staff person, Ms. Roxanne Matthews, to serve as the Richland County Ozone Coordinator on March 1, 2003.
- Ms. Matthews was replaced in this capacity by Mr. Joseph Cronin on March 15, 2005. Mr. Cronin continues to serve as Ozone Coordinator.

Estimate of Emission Reductions (if available)

Not applicable. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

Completed in 2003 and continuing.

2. Gas can exchange events

- Working with Lexington County, DHEC, and other sponsors, Richland County held two gas can exchange events, on June 5, 2004 and October 16, 2004.
- Over 200 cans were exchanged during the June and October events.

Estimate of Emission Reductions (if available)

DHEC estimates that these exchanges will result in a reduction of 475 lbs of VOC's per year. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

Completed in 2004.

3. Support state-wide emission reduction efforts

Description of Measure

Richland County has offered support to DHEC for statewide emission reduction efforts such as restrictions on open burning and BACT.

1. SC61-62.2 "Prohibition of Open Burning" regulation with reductions for 2007 calendar year - reductions expected during the ozone season for residential construction waste. DHEC estimates that this will result in a reduction of 54.16 tons of VOC's per season, and 11.4 tons of NOx per season.
2. SC61-62.5, Std. 5.2 "Control of Oxides of Nitrogen" reduction amount for both existing and new sources combined across Lexington and Richland counties for 2007 calendar year. DHEC estimates that this will result in a reduction of 183.5 tons of NOx per season.

Estimate of Emission Reductions (if available)

See information above. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

Completed on June 25, 2004 with continuing restrictions.

4. Promote land-use planning

Description of Measure

Intentionally altering the urban environment to improve air quality. Examples are transit oriented development, infill development, and pedestrian oriented development, concentrated activity centers, strengthening downtowns, balancing location of housing and employment opportunities. Can include policies, programs or actions such as zoning regulations, design controls, "green development" practices, and incentive programs to encourage smart growth.

Through Richland County's new Land Development Code, the county has altered its zoning regulations, design controls, and "green development" practices in an effort to promote smart, sustainable growth, which will aid in improving air quality throughout the county and region. Updates to the code are designed to address the following areas:

1. To provide for adequate light, air, and open space;
2. To prevent the overcrowding of land to avoid undue concentration of population and to lessen congestion in the roads;
3. To facilitate the creation of a convenient, attractive, and harmonious community;
4. To protect and preserve scenic, historic, cultural, or ecologically sensitive areas;
5. To regulate the density and distribution of populations and the uses of buildings, structures and land for trade, industry, residence, recreation, agriculture, forestry, conservation, airports and approaches thereto, water supply, sanitation, protection against floods, public activities and other purposes;
6. To facilitate the adequate provision or availability of transportation, police and fire protection, water, sewage, schools, parks and other recreational facilities, affordable housing, disaster evacuation, and other public services and requirements as are set forth in this chapter;
7. To secure safety from fire, flood, and other dangers;
8. To encourage the development of an economically sound and stable county;
9. To assure the timely provision of required roads, utilities, and other facilities and service to new land developments;
10. To assure the adequate provision of safe and convenient traffic access and circulation, both vehicular and pedestrian, in and through new land developments;
11. To assure the provision of needed public open spaces and building sites in new land developments through the dedication or reservation of land for recreational, educational, and/or transportation purposes;
12. To assure, in general, the wise and timely development of new areas, and redevelopment of previously developed areas in harmony with the comprehensive plans of Richland County and its municipalities;
13. To assure compatibility between neighboring properties and adjacent zoning districts; and
14. To further the public welfare in any other regard specified by the Richland County Council.

- Among its many purposes, the LDC specifies planning requirements that seek to “lessen congestion in the roads.” For the first time, site plans for major land development must include a traffic management plan: “An evaluation of the effect of traffic generated by a development on the operation and safety of the adjacent public roads. Such analysis shall include an identification of traffic impact mitigation measures needed to improve the safety, operation, and flow of vehicular and pedestrian movement into and out of the development.”
- Richland County Council sponsored a neighborhood meeting on April 16, 2005, to share information on planning, design, and development of livable communities. Dr. Chuck Bohl, an internationally recognized expert on this topic is scheduled to speak.
- Richland County has contracted with the Palmetto Conservation Foundation (PCF) to address how land use, transportation, parks, and trails can be incorporated into a greenway network that builds on the Three Rivers Greenway and Palmetto Trail and promote integrating physical activity into daily routines. The primary activities of focus are bicycle/pedestrian transportation, safe routes to school, and community planning. In combination with Bicycle/Pedestrian planning now underway at the Columbia Metropolitan Planning Organization, car commuters will have additional commuter options. PCF has already participated in a successful active living campaign in Spartanburg, South Carolina, which brings, in part, an air quality benefit that Columbia and Richland County want to emulate.

Estimate of Emission Reductions (if available)

Not applicable. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

Completed. Richland County’s new land development code went into effect on July 1, 2005.

5. Join and participate in Clean Cities

Description of Measure

The county joined the coalition in an effort to seek ways to increase the availability of alternative fuels in our county, to increase the use of those fuels, and to increase public awareness of the benefits of using alternative fuels.

- Richland County signed on as a stakeholder in the Palmetto Clean Fuels Coalition (which is now Clean Cities) on July 22, 2003.
- Richland County sends a representative to all Clean Cities meetings, including the most recent meeting on March 23, 2003.
- With the assistance of the coalition, there are now six service stations that offer E85 to the public in Richland County.

Estimate of Emission Reductions (if available)

Not applicable. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

Completed in 2003 and continuing.

6. Industry Advisory Panel

Description of Measure

Richland County seeks to create a forum by which local industries can communicate new ideas, and inform each other of the strides each has made in ozone reduction. This panel will focus on industries emitting the highest amounts of VOCs and NOx, but all Richland County industries and other interested parties will be invited to participate. Form a group representing stationary NOx sources in the county to share best practices, share technical resources in the county and pursue targeted NOx reductions. This group could review emission inventories and modeling data to identify stationary sources with significant impact on ozone air quality. This group could also share best practices for NOx control technology and technical/engineering resources and encourage NOx reductions to support ozone attainment.

- Attempts to assemble an advisory panel have been met with little interest to date.

Estimate of Emission Reductions (if available)

Not applicable. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

This initiative is currently on hold pending further interest.

The county has expressed interest in working with DHEC and neighboring counties/municipalities to develop strategies to engage local industries in air quality issues.

7. Replace gasoline golf carts with electric cars

Description of Measure

Richland County has researched the possibility of purchasing electric golf carts for county fleet. The County currently has 4 golf carts, all of which use gasoline. Electric carts are lower maintenance and lower cost, and parts are also easier to obtain, thus providing more of an incentive to purchase electric carts in the future.

- There are currently no plans to replace existing gasoline golf carts with electric. However, as carts in the county fleet are replaced, electric carts will be preferred over gasoline, if practicable.

Estimate of Emission Reductions (if available)

Not applicable. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

Pending the replacement of golf carts, as needed.

8. Assist with establishing alternative fuels for public fleets.

Description of Measure

Fuels other than gasoline and diesel that are used to power on-road vehicles. Examples of alternative fuels include bio-diesel, electricity, ethanol, liquefied petroleum gas, methanol and natural gas.

On October 13, 2004, Richland County Government published an ambitious administrative directive to increase the purchase of alternative fuel vehicles, the purpose being to significantly improve air quality in the region and to decrease County dependence on the less desirable petroleum. Conversion of the current fleet of 400 vehicles (excludes emergency and heavy-duty) has begun with the budgeting of twenty-four alternative fuel vehicles in FY2006. By purchasing at this level each year for five years, the County will reach the goal of 120 AFVs (30%) by the year 2010.

Administration has also issued a policy directive requiring all vehicle purchases to be approved by the County Fleet Manager. By staying current on available AFV models, the County will make better decisions on vehicle orders, insuring maximum participation in this directive. Under this policy, the county continues to pursue flexible fuel, alternative fuel, and hybrid vehicles for its fleet.

a. Purchase Flexible and Alternative Fuel Vehicles

The county has purchased approximately two dozen flexible fuel (E85/Gasoline) vehicles for its public fleet. More flexible fuel vehicles will be purchased in future years as funding and availability under the state contract permits.

There were 1,815 gallons of biodiesel purchased and 38,020 gallons of ethanol purchased in 2004 in Richland County. There are approximately 745 alternative fuel vehicles operating within federal, state, county, and municipal government.

Status: Approximately two dozen purchased to date. Future purchases are planned.

b. CNG Buses for CMRTA

The Central Midlands Regional Transportation Authority (CMRTA) has 7 compressed natural gas (CNG) buses in its fleet, with the remaining vehicles operated by the "clean diesel" technology. CMRTA used 60,031 gallons of CNG during 2004.

Status: Completed.

c. Ongoing research into new cleaner and alternative fuels

County staff, in conjunction with DHEC and the Palmetto State Clean Fuels Coalition, continues to research and consider the possibility of using other alternative fuels, such as biodiesel and hydrogen.

Staff has attended meetings and special events regarding cleaner and alternative fuels, including:

- **Clean Cities Meetings**
- **Biofuels Showcase held in Columbia on November 18, 2005 (Columbia)**
- **Fuel Cell South 2006 Hydrogen Conference, April 24 – 26, 2006 (Columbia)**

On April 13, 2005, there was a grand opening of 2 ethanol-refueling stations within the Richland County available to the public. There were two constructed in 2004. The opening of these stations was made possible by efforts of the Palmetto States Clean Fuel Coalition and its local members.

Status: Completed. Staff will continue to attend and participate in upcoming alternative fuel events.

d. Pursue grant opportunities for alternative fuel infrastructure and equipment

The county, in conjunction with DHEC, continues to pursue grant funds to convert existing vehicles to alternative fuel, to purchase new alternative fuel vehicles, and to install the needed infrastructure to service alternative fuel vehicles.

1. CNG Vehicles Grant Application

Status: Applied in 2004, Unfunded.

2. Diesel Retrofit Grant Application

Status: Applied in 2004, Unfunded.

3. E85 Fueling Infrastructure Grant Application

Status: Applied in 2005, Unfunded.

e. Purchase Hybrid Vehicles

The county took delivery of eight hybrid pick up trucks in March and April of 2006. These are the first hybrid vehicles in the County's fleet. The trucks have 12% better fuel economy and release 1600 fewer pounds of emissions each year

than similar non-hybrid models. The trucks also have several outlets which allow county staff to run electrical equipment off the battery of the vehicle, rather than a gasoline powered generator.

Status: Completed.

- The Governor signed Hybrid vehicle bill H4312 on June 1, 2006. Act 312, R371, H4312 Bill may be viewed at http://www.scstatehouse.net/sess116_2005-2006/bills/4312.htm and its caption reads: An act to amend the Code of Laws of South Carolina, 1976, by adding Section 12-6-3377 so as to allow a state income tax credit equal to twenty percent of certain new hybrid, fuel cell, alternative fuel, or lean burn technology motor vehicle. Credits allowed against a taxpayer's federal income tax liability.

Estimate of Emission Reductions (if available)

Not applicable. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

Completed in 2004 and continuing

9. Implement a program to educate and motivate individuals to take actions to minimize ozone pollution.

Description of Measure

Includes a focused distribution of educational materials, dissemination of SCDHEC ground-level ozone forecast, increased media alerts to specific audiences, and includes action oriented components (i.e. ridesharing, telecommuting, etc.) Aims to foster ozone awareness and to educate and motivate individuals to take actions to minimize ozone pollution

Richland County is committed to promoting ozone awareness, both internally and externally. By using the measures listed below, the County has sought to educate residents about the harmful effects of ozone, and the everyday steps they can take to improve air quality and reduce ozone in Richland County.

a. Place SCDHEC's Daily Air Quality Index on the County Website

Since May 2005, a link has appeared on the County's main page, www.rcgov.us, directing visitor's to DHEC's daily air quality report. DHEC updates the index on a daily basis during the ozone season.

Status: Completed

b. Place air quality related informational and educational items on the County's website

A link appears on the County's main page for information on the Ozone EAP, <http://www.rcgov.us/information/ozone/home.asp>. The page includes information about the County's plan, progress reports, links to informational websites, and electronic versions of educational fliers and brochures.

Status: Completed

c. Have a plan in place to issue press releases and promote news coverage of the county's ozone-related events and initiatives

The Ozone Coordinator, working in conjunction with the Public Information Office, frequently issues press releases and offers media interviews to promote ozone awareness and to highlight county initiatives.

Status: Completed. Press releases are released on a regular basis.

d. Actively participate in Ozone Awareness Week

The county actively participated in Ozone Awareness Week during the week of

March 28 – April 1, 2005.

Status: Completed

e. Place informational posters in the County Administration Building

Informational (“Good Up High, Bad Nearby”) posters appear in the lobby of the building, directly across from the Treasurer's Office, where residents come to pay vehicle and other taxes. The posters were put up in Spring 2005 and remain.

Status: Completed.

f. Place informational brochures and fliers in the County Administration Building

Informational brochures and fliers appear in the lobby of the building. The supply is restocked as needed.

Status: Completed.

g. Encourage mass transit and other transportation alternatives

Employees are encouraged via email to use mass transit, especially prior to forecasted ozone awareness days. A poster is currently being developed to be placed in the lobby to advertise bus service and the SmartRide Program.

Status: Completed, with continuing updates and promotion.

h. Keep county employees updated on air quality issues by email regularly

The county's Ozone Coordinator frequently e-mails county staff regarding air quality issues. E-mails in 2005 included updates on forecasted ozone action days, information on the availability of E85 and other alternative fuels, a list of things you can do to improve air quality, and car maintenance tips to improve fuel efficiency and lower emissions.

Status: Completed, with continuing updates.

i. Use the county's new television show, Richland Revealed, to promote ozone awareness

Richland County has entered into an agreement with the local WB station to broadcast Richland Revealed at 11:30 am on Sunday mornings. An episode of the show to be dedicated to car care and air quality awareness was aired during the spring of 2006 in conjunction with Car Care Awareness Week.

Status: Completed.

j. Actively participate in Car Care Awareness Week

Richland County was a participant in DHEC's Car Care Awareness Week activities. A segment of the county's television show was dedicated to promoting the event, and staff was on hand to assist.

Status: Completed.

k. Actively participate in Earth Day Events

SC DHEC held Earth Day festivities on April 22 at the SC State Museum, located in Richland County. Other events corresponding with the event were held, including an alternative fuels display at Earth Fare, a local health food store.

Status: Completed.

Estimate of Emission Reductions (if available)

Not applicable. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

Completed in 2005 and continuing.

10. Meet with representatives of other metropolitan areas that have implemented programs to learn from experiences.

Description of Measure

Engage other governmental entities and organizations to share ideas and build knowledge of air quality issues. Determine feasibility of replicating successful programs or components in local areas.

Richland County is committed to learning from and sharing ideas with other governments and organizations in order to build knowledge of air quality issues. Such actions have included:

a. Survey on government hybrid vehicle use and performance (nationwide)

The county Ozone Coordinator undertook a nationwide survey by e-mail of government agencies using hybrid vehicles. Survey results, in conjunction with economic and environmental incentives, influenced the county's decision to purchase eight hybrid vehicles in the current fiscal year.

Status: Completed.

b. Research of lawnmower exchange programs (nationwide)

The county Ozone Coordinator, working in conjunction with DHEC and the Ozone Coordinator in neighboring Lexington County, has researched previous lawnmower exchange programs that have occurred in other parts of the country. Results from this contact has assisted the three agencies in planning a lawnmower exchange event to be held in 2006.

Status: Completed.

c. Participation in Clean Cities, which has stakeholders from other counties, municipalities and state agencies, as well as representatives from the private and non-profit sector.

Richland County joined Clean Cities in July 2003, and sends a member of staff to all Clean Cities meetings.

Status: Completed, Staff will continue to attend stakeholder meetings.

d. Work with non-profit organization and environmental groups on air quality-related issues.

Richland County has established working relationships and lines of communication with environmental organizations such as:

1. **The Southern Environmental Law Center**, which published a “Clean Air Report for the Columbia Area” on June 6, 2005.
2. **Keep the Midlands Beautiful and other local organizations**, who assist in air quality outreach and participate in local events, such as the gas can exchange events.

Estimate of Emission Reductions (if available)

Not applicable. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

Completed in 2003 and continuing.

11. Use compressed work weeks or flexible work hours

Description of Measure

Offer compressed work weeks or flexible schedules to county employees. The implementation of compressed work weeks and flex time helps reduce traffic congestion during the peak driving hours by spreading out the number of vehicles on the roadway over a longer period of time.

a. Flex Scheduling

Richland County has implemented flex scheduling, and many Richland County employees operate on flex schedules. We hope to expand this program to other departments where feasible (excluding most emergency services employees.)

Estimate of Emission Reductions (if available)

Not applicable. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

Completed in 2004 and continuing. To be expanded as feasible.

12. Encourage carpooling, vanpooling as an option where employees living in the same area agree to ride to work together rather than to drive their individual vehicles to work.

Description of Measure

Encourage carpooling whenever possible and also encourage mass transit as an alternative to single passenger trips

a. SmartRide

SmartRide is a park and ride service offered by SC Department of Transportation, and offers service between Columbia and outlying Camden, Sumter and Newberry. County employees and visitors to Richland County from the Camden, Sumter, and Newberry/Chapin areas are encouraged to ride SmartRide.

Status: Completed, with continued promotion. The service, provided by the SCDOT, remains available.

b. CMRTA Bus Service

County employees and visitors to Richland County are encouraged to use the Central Midlands Regional Transportation Authority's bus system, with service in Columbia and surrounding areas. The system serves more than 40,000 passengers each week.

In 2005, the CMRTA was named the most improved public transportation system in South Carolina.

Status: Completed, with continued promotion.

c. Car-Pooling

In 2004, the County Ozone Coordinator undertook a survey of county employees to gauge interest in car-pooling initiatives. Unfortunately, county employees expressed little interest in car-pooling initiatives.

Following the recent increase in gas prices, the Ozone Coordinator began researching new park-and-ride and car-pooling initiatives. Research has been done as to which zip codes county employees are coming from. In upcoming months, a survey will be again be administered to county employees to see if there is more interest in car-pooling and park-and-ride. If there is sufficient interest, a pilot park-and-ride program is expected to begin. If successful, the program will expand to other areas of the region.

Status: Employee car-pooling initiatives have not yet been initiated due to low interest. However, staff will continue to gauge interest in car-pooling and park-and-ride.

Estimate of Emission Reductions (if available)

Not applicable. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

Completed in 2004 and continuing.

13. Local government joins and participates in the SC Early Action Plan for 8-hour Ozone.

Description of Measure

Join and participate in the SC Early Action Plan for 8-hour Ozone. Given its non-attainment status under the new 8-hour ozone standard, Richland County is actively participating in the South Carolina Early Action Program in an effort to promote cleaner air sooner through the implementation of various emission reduction strategies. The county remains committed to the EAP and the emission reduction strategies listed below.

- County Council agreed to participate in the early action program in December 2002. Since that date, the county has maintained its commitment to pursuing each of its emission reduction strategies to the fullest extent possible, and will continue to look for new and innovative ways to promote cleaner air countywide.
- Preliminary data from SCDHEC shows that for the first time since the new federal standard went into effect, the three-year average of fourth highest ozone concentrations at each of the three ozone monitors located in Richland County now meet the tougher standard.

Estimate of Emission Reductions (if available)

Not applicable. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

County Council agreed to participate in December 2002. The process continues through 2007.

14. Develop City and County Energy Plan (Energy Conservation)

Description of Measure

An energy plan could be developed that directs municipal departments to reduce energy use. This could include retrofitting municipal buildings/city schools and street lights for energy efficient, i.e. "Energy Star" Program, white roofs, etc., promoting transportation alternatives, and encouraging recycling and composting.

- a. Richland County currently promotes internal recycling in the administration building, as well as other county-owned buildings. Recycling bins are placed throughout the building, ranging from white paper to aluminum can receptacles. We remind employees to turn off lights and computers when not in use.
- b. County Council is currently considering the possibility of hiring an energy conservation contractor to survey county buildings for inefficiencies and to plan for financing any needed upgrades to county facilities.
- c. The City of Columbia has proceeded and is currently considering proposals for an energy conservation contractor.

Estimate of Emission Reductions (if available)

Not applicable. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

Completed, with continuing reminders and further implementation pending Council action.

15. Assign staff to become air quality contact/expert for jurisdiction

Description of Measure

The staff member assigned as air quality contact is also the expert for the jurisdiction.

- Please see Measure 2, Assign a county air quality contact.

Estimate of Emission Reductions (if available)

Not applicable. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

Completed in 2003 and continuing.

16. Encourage Mass Transit (transportation choices and alternatives)

Description of Measure

All Richland County citizens have access to mass transit.

- Use of mass transit is specifically encouraged for county, city and state employees.
- Palmetto Health Richland and Baptist are the first and second largest users of the bus system respectively.
- Since education and awareness foster ozone awareness and to educate and motivate individuals to take actions to minimize ozone pollution” section g. foster use of public transit, this measure has been included as part of measure 9,” Implement a program to

Estimate of Emission Reductions (if available)

Not applicable. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

Completed and continuing with continuing reminders.

17. Encourage not overfilling your fuel tank.

Description of Measure

Stop when the nozzle clicks off.

- This information is contained on fliers that are posted throughout county departments. The flier is also online, and available to the public.

Estimate of Emission Reductions (if available)

Not applicable. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

Completed in 2003 and continuing.

18. Restrict mowing days and times all year, especially during ozone season/ozone action days. Promote the use of electric and propane lawnmowers

Description of Measure

Ozone action days will be a factor in scheduling county activities. Also, the county seeks to communicate to large landscaping firms asking for cooperation and encouraging all in the county to refrain from use of gas-powered equipment on ozone action days.

- Per the Richland County Administrator's directive, all mowing and the use of gas-powered lawn equipment on County property should be restricted on Ozone Action Days (orange and above), when manageable. In addition, the County will seek to landscape facilities in ways that reduce equipment use, thereby requiring lower maintenance, and resulting in fewer emissions. This directive went into effect on October 8, 2004.
- Lawnmower exchange event - Working with Lexington County, DHEC, and other sponsors, Richland County is currently planning a lawnmower exchange event to be held in the Summer of 2006. During the event, citizens will be able to turn in an old gasoline-powered engine in exchange for a discount on a new, electrically-powered lawnmower. This event will be the first of its kind held in the State of South Carolina. Due to staff changes at Richland and Lexington County, this event was pushed back from Spring 2006 to Summer 2006. Richland County is currently working with DHEC and Lexington County to finalize the exchange, which is planned to take place in Summer 2006.

Estimate of Emission Reductions (if available)

Not applicable. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

Completed in 2004 with continuing restrictions.

19. Consider Tree Planting/landscaping standards.

Description of Measure

Planted trees reduce the need for air conditioning, reduce the heat island effect in urban areas, and reduce energy usage. Tree ordinances could be drafted to establish minimum tree planting standards for new development; and to promote strategic tree planting, street trees, and parking lot trees.

Landscaping standards are included in the Land Development Code. Tree ordinances have been drafted to establish minimum tree planting standards for new development, and to promote strategic tree planting, street trees, and parking lot trees. Stringent specifications are laid out in this section along with repercussions for not abiding by these standards.

- The Land Development Code's proposed implementation date is January 1, 2005.
- The Planning Commission transmitted its recommended draft of the Land Development Code to the County Council on 12/31/03 and the Landscaping Standards, Section 26-176 on 2/13/04. The New Land Development Code - Effective 7/1/05 - revised 11/9/04 is available online at:
<http://www.richlandonline.com/information/town/LandDevelopmentCode110904.pdf>
Landscaping Standards, Section 26-176 is located on pages 254 through 270.

Estimate of Emission Reductions (if available)

Not applicable. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

Completed. New Land Development Code effective 7/1/05.

20. Reduction of NOx and VOC emissions at International Paper (IP): Eastover Mill

- The Eastover facility has utilized the “best available control technology” on all of their NOx and VOC emission units at the time of initial installation, and subsequently as part of any significant modification. The power boilers at the Eastover Mill produce low NOx emission levels because of both their design (e.g. tangential firing) and fuel type (e.g. waste wood). One power boiler at the Eastover Mill is covered under the “NOx SIP” and is expected to have emission levels well below their current allocation.
- An MOA was signed with International Paper in which the facility agreed to take an annual allowable Nox emission reduction of 1,000 tons at the Eastover Mill facility. The Title V permit for the Eastover Mill provides for allowable NOx emissions totaling 5,155 tons/year. The facility-wide annual allowable NOx reduction will reduce allowable NOx emissions at the Eastover Mill from 5,155 to 4,155 tons/year. This agreement went into effect on August 12, 2004.

Estimate of Emission Reductions (if available)

No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

Completed in 2004.

21. Reduction of emissions at SCE&G: Wateree Plant

- An MOA was signed with the SCE&G Wateree facility in which the facility agreed to take permit limits on two coal-fired boilers during the ozone season as their commitment to the EAC process. NOx emissions from any boiler equipped with selective catalytic reduction systems are not to exceed .15lbs/MMBtu averaged over a 5-month period. This agreement went into effect on September 27, 2004.

Estimate of Emission Reductions (if available)

No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

Completed in 2004.

22. Prohibit/limit/ban open burning. Encourage mulching clearing debris as an alternative to burning

- Richland County's Code of Ordinances prohibits all fires within the right-of-way of any street, road, or highway except in certain cases. Open fires may be set in performance of an official duty of any public officer when deemed necessary to protect property, life, or the public welfare. Salamanders or other devices may be used for heating by construction or other workers, provided no nuisance is created.
- Open burning is prohibited within any "residential" zoning district (with a few exceptions). During a pollution alert declared by duly constituted authority, any and all open burning shall be unlawful. (Codified in Richland County Code of Ordinances, Section 10-1.)

Estimate of Emission Reductions (if available)

DHEC estimates that these restrictions will result in a reduction of 54.16 tons of VOC's per season, and 11.4 tons of NOx per season. No reduction credits were taken for this measure in the South Carolina Early Action Compact SIP.

Implementation Status

Completed in 2004 with continuing enforcement.

Measures not included in the December 2004 SIP submittal

The following activities were not listed in the December 2004 SIP submittal under Appendix 8 – Local Action Plans, but are additional measures achieved in the Richland County Area.

****Described in Appendix 16 – County Level Emission Reductions and Descriptions For the Ozone Early Action Compact Areas of the December 2004 SC SIP submittal.**

1. School bus retrofit project (SC Department of Education) **

The South Carolina Department of Education will retrofit approximately 21 diesel buses with particulate filters during 2006. (SC Department of Education. Additional reductions of PM are also expected.) The school buses may not be retrofitted until 2007 when ultra-low sulfur diesel is more widely available since the retrofitting technology being applied works best with this new fuel type. The Environmental Protection Agency's ultra-low sulfur diesel fuel requirements went into effect on June 1, 2006. Ultra-low sulfur diesel fuel will be available at retail stations beginning summer 2006.

DHEC estimates that these retrofits will result in a reduction of 357 lbs of VOC's per year as well as 2,499 lbs of CO per year.

In addition:

- The Department of Education has been awarded a Clean School Bus USA Grant for \$499,099 to retrofit some buses in South Carolina with diesel oxidation catalysts and crankcase filters, replace some older buses and conduct a biodiesel pilot and an idle-reduction device pilot.
- State Education Superintendent Inez Tenenbaum signed an order on June 20, 2006 to buy 630 new school buses with roughly \$36 million appropriated by the Legislature. These buses should be on South Carolina roads by the end of the year. These new buses will replace vehicles from 1984 and 1985 which are not fuel efficient and produce higher levels of polluted emissions than more modern vehicles.
- The benefits from these South Carolina Department of Education (SDE) funding sources will be distributed throughout the state. The SDE has agreed to make York County and the five deferred areas the top priority in assigning new and retrofitted buses to service. SDE is also partnering with private companies and local school districts to provide specific funding for school bus retrofits and clean air programs.

Status: To be completed in 2006.

2. Biodiesel buses at the University of South Carolina **

The University of South Carolina, located in Richland County, has begun using 80/20 biodiesel to fuel several of its shuttle buses. The program began in 2002 with a grant from the DOE to offset the marginal cost of biodiesel fuel, and benefited from the long-term loan of a tank from United Energy.

DHEC estimates that this program will result in a reduction of 12 lbs of VOC's per year, 25 lbs of NOx per year, and 34 lbs of CO per year.

Status: Completed.

3. University of South Carolina Ethanol Project **

The University of South Carolina, located in Richland County, has begun replacing regular gasoline vehicles with alternative, flexible-fuel vehicles, and has installed E85 infrastructure to supply those vehicles. (Other smaller gasoline-powered vehicles have been replaced with electric vehicles.)

DHEC estimates that this program will result in a reduction of 18.9 lbs of VOC's per year, 18.3 lbs of NOx per year, and 1250 lbs of CO.

Status: Completed, with continuing future vehicle replacements.

4. SCDHEC Initiatives in Richland County

SCDHEC, headquartered in Richland County, has initiated programs that encourage employees to choose pollution-reducing transportation alternatives. DHEC also has a number of flex-fuel vehicles which run almost exclusively on E85.

- a. **"Take a Break from the Exhaust"** runs during the ozone season and reduces the number of miles traveled in Richland County. **

DHEC estimates that these programs will result in a reduction of 568 lbs of VOC's per ground level ozone season, 393 lbs of NOx per ground level ozone season and 5,494 lbs of CO per ground level ozone season.

Status: Completed.

- b. The use of **flex-fuel vehicles** has resulted in the displacement of approximately 23,500 gallons of gasoline annually. **

DHEC estimates that this program will result in a reduction of 104 lbs/yr of VOC's, and 103 lbs/yr of NOx and 6,030 lbs/yr of CO.

Status: Completed.

5. Kerosene container exchange event

Working with Lexington County, DHEC, and other sponsors, Richland County is currently planning a kerosene container exchange event to be held in 2006 or 2007.

Status: This event is currently in the planning stages.

6. Develop Air Quality Awareness and Improvement Policy **

On October 8, 2004, the County Administrator issued a directive for the purpose of establishing policies by which air quality and awareness will be improved via recurring activities of County government. Details of the policy include:

1. Ensure that all employees continue to be notified of upcoming ozone action days. Notification occurs via email.
2. Departments allowed to promote flex-scheduling where feasible. Certain employees in emergency services departments are unable to practice flex-scheduling, but other operational departments are allowed to promote this option where manageable.
3. Richland County has several Tier II compliant vehicles and pieces of equipment currently in its fleet and will increase this number. Richland County had budgeted for 13 alternative fuel vehicles (AFVs) in FY 2004-2005, with an increase in the purchasing of AFVs thereafter. It shall be the goal of the County that by 2010, 30% of the County fleet will be the lowest emission vehicles practical.
4. All County vehicles and equipment are operating according to the manufacturer's specifications, and shall continue to do so. Richland County currently uses recyclable oil filters with an extended service interval capacity, which allows the county to perform oil changes at 4,000 or 5,000 miles instead of 3,000. Richland County seeks to incorporate synthetic oils and fluids in its maintenance program, which offer superior protection and longer service intervals.
5. Drivers are required to eliminate vehicle idling. Exceptions include emergency vehicles, traffic/weather conditions, and vehicles being repaired, maintained, or inspected. These exceptions should occur only as reasonably required for specific operations.
6. Restrict mowing and use of gas-powered lawn equipment on County property on Ozone Action Days (orange and above) where manageable.
7. The County will seek to landscape facilities in ways that reduce equipment use, thereby promoting lower maintenance, resulting in fewer emissions.
8. During a pollution alert, such as an ozone action day, all outdoor burning shall be unlawful. (See Richland County Ordinance Chapter 10, Section 10-1.)

9. Richland County will continue to practice energy conservation in all County facilities. Conservation measures include turning off lights and computers on nights, weekends, and on holidays. Strong emphasis and preference will be placed on purchasing Energy Star compliant products.
10. Recycling efforts shall remain ongoing at County facilities.

Status: Completed, with continuing reminders and compliance monitoring.

7. Promote bicycling and pedestrian strategies as an alternative to driving

Richland County is committed to promoting bicycling and walking as an alternative to driving by providing greater access to bicycle and pedestrian pathways.

a. Columbia Cycle Summit

A Columbia Cycle Summit was held on Friday May 12, 2006 at EdVenture in Columbia. Andy Clarke, Executive Director of the League of American Bicyclists, was the keynote speaker. The workshop's goal was to develop an action plan for the city in order for Columbia to be designated as a bicycle friendly community by the league.

Status: Completed.

b. Bicycle and Pedestrian Pathways Plan

On May 13, 2006, the Central Midlands Council of Governments unveiled a proposal, known as the Bicycle and Pedestrian Pathways Plan, which calls for 26 cycling projects to be completed in and around the City of Columbia in the next two years. Included in the plan are new bike lanes on area roads, as well as new lanes on an abandoned rail line.

Status: Plan completed, implementation pending funding.

a. Columbia Cycle Summit

The USC Prevention Research Center and the SC Department of Transportation invite held a live broadcast of "Bicycle/Pedestrian Planning Strategies: From SAFETEA-LU to Safe Routes to School" on May 4, 2006, from 1:00 to 4:00 pm, EDT, at the Moore School of Business.

The purpose of this broadcast was to highlight key bicycle and pedestrian provisions of SAFETEA-LU and the administrative efforts underway to implement them. In addition, a panel of stakeholders discussed their successful programs and initiatives. These presentations provided insight into the broad range of activities supported by the legislation and offered guidance on implementing programs in communities across the country.

Status: Completed.

8. Expand e-government technology to cut down on unnecessary trips to county buildings

Richland County has greatly expanded its e-government options. Using e-government to allow citizens to make tax payments, download forms, view maps, and have their questions answered will allow for fewer trips to the county administration building.

- **Online tax payments** – Completed
- **Online business license payments** – Completed
- **Online forms database** – Completed
- **Online GIS Mapping application** – Completed, with continuing upgrades

9. Santee Cooper's "Green Power" Generating Station

Santee Cooper's third "green power" generating station began operation in Richland County on April 6, 2006. The \$8.5 million facility is located at Waste Management's Richland County landfill near Elgin. Methane gas produced by decomposing waste at the 124-acre landfill fuels a 5.5-megawatt gas-turbine generator.

The voluntary "green power" program is offered to residential customers in blocks of 100-kilowatt-hours each. Because it costs more to produce "green power" than by conventional means, a \$3 premium is charged on a customer's monthly electric bill.

Status: Completed.

10. Create a regional partnership to deal with air quality issues

Following a meeting with Myra Reece, Bureau Chief for SCDHEC's Bureau of Air Quality, on October 5, 2006, the Richland County Administrator began dialogue with the Lexington County Administrator to gauge Lexington County's interest in undertaking a regional approach to air quality issues, coordinated by the Central Midlands Council of Governments. Lexington County has expressed interest in a regional approach. A letter will be drafted to the COG in early 2007, and signed by the administrators of both counties.

While this measure is currently in the earliest stage, this represents a significant step forward in bringing both counties together in an effort to solve a regional issue on a regional level.

11. Participation in Early Action Compact Summit

Richland County was the location for SCDHEC's first ever statewide Early Action Compact Summit on August 16 and 17, 2006. The conference was attended by over 200 participants. A number of information sessions were held on topics such as alternative fuels, education and outreach, and land use. A number of vendors were also on hand to promote energy saving and pollution-reducing technologies.

A number of county staff attended the summit, including the Research Manager/EAC Contact, Joe Cronin; Grants Manager, Audrey Schifflett; Fleet Manager, Bill Peters; and Planning Manager, Michael Criss. Many local leaders, such as the Mayor of Blythewood, Pete Amoth, were also in attendance.

12. SCE&G SO₂ Wet Scrubber for Wateree Station

SCE&G, Fossil-Hydro Generation, has initiated an Engineer/Procure/Construct (EPC) contract with Fluor Corporation to place into operation a single tower SO₂ wet scrubber for Wateree Station. The current plan has both units at Wateree discharging the flue gases into a single wet SO₂ scrubber tower. While SCE&G has not yet finalized the equipment supplier, they anticipate a wet SO₂ scrubber optimal removal efficiency to be 92-98%.

Based on 2005 SO₂ emissions, and factoring in maintenance and operating conditions, a removal rate of approximately 40,000 Tons annually may be achievable. Until the final supplier is selected and actual performance information is measured on the completed project will we have confidence in the actual removal rate.

Also, with the installation of the wet SO₂ scrubber, a side benefit may be a reduction of mercury emissions; however, this possible reduction won't be determined until project completion and final testing.

Currently, this project is tentatively scheduled to start in 2007 and should be completed by early 2010.

13. Free Showing of Kilowatt Ours: A Plan to Re-Energize America at USC

A free Showing of Kilowatt Ours: A Plan to Re-Energize America was held at USC on September 13, 2006. Director Jeff Barrie was on hand to lead a discussion after the showing on topics such as mountaintop removal mining, air pollution, global warming, childhood asthma, and mercury contamination.

14. Columbia announced as one of four locations for hybrid bus demonstrations

Columbia was announced as one of four cities where a 37-passenger hybrid bus will be demonstrated.

The local initiative was brought about by a partnership between USC, the S.C. Research Authority, and the Central Midlands Regional Transit Authority.

It is expected that the hybrid bus will be in operation by the time Columbia hosts the National Hydrogen Association's annual meeting in Spring 2009.

15. City of Columbia signs Mayor's Climate Protection Agreement

On October 10, 2006, Mayor Bob Coble and the Columbia City Council signed the Mayor's Climate Protection Agreement, joining nearly 300 other cities nationwide who have also signed onto the agreement. By signing the agreement, the city has agreed to undertake methods designed to cut greenhouse emissions such as carbon dioxide and methane by 7 percent by the year 2012. Because of its pledge to reduce global warming and pollution, the South Carolina Chapter of the Sierra Club designated Columbia as a "Cool City."

16. City of Columbia unveils eWaste Program

The City of Columbia has announced that beginning December 1, 2006, residents can turn in any electronic device, including unwanted radios, computers, televisions, appliances (except refrigerators), consumer electronics, etc. at a local drop off facility on Colonial Drive for recycling. All electronic devices will then be taken to an Aiken-based company, Global Recovery, to recycle.

17. City of Columbia votes to protect two acres of trees

On October 18, 2006, the City of Columbia approved a plan that would allow Dreher High School to build new athletic facilities on a parcel of land near Owens Field Airport. Residents feared that two acres of trees would be lost under the school district's preferred option, however the city approved an option that would reconfigure an existing skateboard park in order to preserve the existing trees.

18. City of Columbia initiates Climate Protection Action Committee

As an extension of its commitment to improving air quality, the City of Columbia initiated a Climate Protection Action Committee, commonly referred to as a "green committee." The committee is made up of a citizen's committee, comprised of council appointees, as well as an advisory committee, consisting of local air quality professionals, city staff, Richland and Lexington County EAC contacts, and DHEC representatives. The committee will be divided into several subcommittees, to study topics such as education and outreach, energy conservation, alternative fuels, and land use planning. The committee will issue recommendations to City Council on ways that the city can reduce air and other types of pollution in early 2007 from the city's 56 buildings and fleet of 100 vehicles. The CPAC will also plan a community-wide summit, scheduled to take place in May 2007. The first CPAC meeting took place on November 30, 2006.

19. Greater Columbia Fuel Cell Challenge

Six awards, totaling over \$150,000, were given to local organizations to spark the use of fuel cells in the Columbia area during the annual meeting of EngenuitySC. Awards included:

- Segway Personal Transport Units for the University of South Carolina
- A backup power system at Benedict College
- A citizen's school for hydrogen and fuel cell technology
- A hands-on exhibit at EdVenture Children's Museum
- Portable batteries for television cameras at SC ETV
- A first responders extended power pack for law enforcement and emergency officials

The fuel cell challenge was project of the USC Columbia Fuel Cell Collaborative, which includes EngenuitySC, the University of South Carolina, the City of Columbia, and the S.C. Research Authority.

20. Melting Pot of Columbia unveils fondue-powered vehicle

Jay Kilmartin, owner of a Columbia Restaurant, the Melting Pot, recently purchased and converted an old ambulance to run on used canola oil from the restaurant. The owner purchased the ambulance on eBay.com and converted it from diesel powered to vegetable oil powered. The vehicle now runs on used oils from fondue. The vehicle is painted in the restaurant's color scheme and features The Melting Pot logo and tagline on each side. The owners have been featured locally, as well as on national news and talk shows, such as the Glenn Beck Show. The ambulance has drawn attention to the use of alternative fuels both in the Columbia area, and around the U.S.

21. Emergency Funding for CMRTA System

In early 2006, Richland County Council was informed by the Central Midlands Transportation Authority that their transitional funding would run out at the end of the year, and if funding was not obtained by that time, service would be cut by up to 85% in Richland and Lexington Counties. After weighing several options, Richland County passed an ordinance in October to increase its road maintenance fees by 16 dollars for personal vehicles, and 24 dollars for commercial vehicles. The revenues from these fees, approximately \$7.5 million, will allow the bus system to maintain its current level of service until a permanent funding source is found. The CMRTA provides a critical service in the Midlands, having provided approximately 2.6 million trips in FY 05-06.

22. Richland County Transportation Study Commission

As part of its temporary funding solution to the CMRTA crisis, Richland County

Council established a Transportation Study Commission to study public transit, road improvements, and walking and bicycle trails. The 33 member commission is expected to release a final report in Spring 2008, as well as a recommendation for funding high-priority transportation projects.

The commission will study transportation issues that are regional in nature. As a result, members will be made up of appointments from Richland and Lexington County Councils, the City Councils in Columbia, Cayce, and West Columbia.

23. Automated vehicle location and tracking system

Richland County recently unveiled an Automated Vehicle Location system, which was highlighted in a recent article in the State newspaper. The system, resulting from a collaboration between the Fleet Manager, IT and GIS staff, will allow the county to track and monitor vehicles in the county fleet at any point in time. The system has safety, management, and air quality applications. Specifically, staff can track and monitor data obtained electronically to see if drivers are using the most economical routes on routine projects, thus reducing fuel costs and emissions from county vehicles.

24. Promotion of Arbor Day and related activities

Richland County Council declared November 25th through December 5th Arbor Day Week. Richland County Government staff and officials partnered with the Richland County Public Library, St. Martin de Pores school, the Governor's Office, the City of Columbia, State Forestry Commission, and the Congaree National Park to organize a variety of events. It has been a highly successful week, including a tree planting in honor of Richland County's 1st ever Arbor Day Baby.

The Midlands Arbor Day Committee hosted several events throughout the week of Saturday, November 25-December 5, 2006 in celebration of Arbor Day, which is Friday, December 1, 2006.

- Nov. 25:
 - Richland County Main Library, Arbor Day Story Time.
- Nov. 27:
 - State House Ceremony- Governor Proclamation and Tree Planting, West Side Grounds.
- Nov. 28:
 - St. Martin de Porres Catholic School, Arbor Day Presentation, 4th grade Students.
- Nov. 30:

- Polo Road Elementary School, Arbor Day Presentation, 3rd-6th grade Students;
- Live Oak Tree Planting and Arbor Day Speaker Tim Womick and an appearance by Councilwoman Val Hutchinson.
- Dec. 1:
 - Tree Planting for 2005 Arbor Day Baby;
 - 2006 Arbor Day Baby Announced;
 - City of Forest Acres School Program, Satchel Ford Elementary School, Proclamation from Mayor Brunson, Live Oak Tree Planting and Dogwood seedlings distributed to children;
 - City of Columbia School Program, Carver-Lyon Elementary School- Multi-Purpose Room, 3rd grade Students, Arbor Day Speaker Tim Womick, Proclamation by Mayor Bob Coble and Live Oak Tree Planting;
 - University of South Carolina Students Allied for a Greener Earth, West Quad Learning Center, Speaker Presentation by Rudy Mancke and a Tree Planting dedication ceremony in Dr. Bruce Coull's honor, the former Dean of the School of the Environment.
- Dec. 2:
 - Congaree National Park Nature Walks
- Dec. 5:
 - Clemson REC at Sandhill, Tree Planting at the Historic Administration Building

Organizations comprising the Midlands Arbor Day Committee were Richland County, City of Columbia, SC Budget and Control Board, Columbia Tree and Appearance Commission, Richland County Appearance Commission, Richland County Conservation Commission, Richland County Conservation District, Forestry Commission, USDA-Natural Resource Conservation Service, Congaree Land Trust, and the City of Forest Acres Appearance Commission.

25. Lawnmower exchange survey and planning

As part of our planned lawnmower exchange (scheduled to take place in spring 2007), Richland County, Lexington County, and DHEC jointly crafted and distributed a lawnmower survey in October 2006. The survey went out to employees at each entity, neighborhood leaders, community organizations, and a link was posted on the Richland County website. The survey generated nearly 200 responses. These responses provide the necessary "market research" that will ensure that the event maximizes its success.

26. Ozone Action Days

The county received information from SCDHEC forecasting two Ozone Action Days in the summer of 2006 (June 22 and August 2, 2006.) Prior to each day, county staff send out emails to all county employees with the following message (a sample from the June 21 message):

The following information was received from the SC Department of Health and Environmental Control:

Air Quality Index for Thursday, June 22

ORANGE (104 AQI) - Unhealthy for Sensitive Groups

Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.

****OZONE ACTION DAY for Midlands, Upstate and CSRA for Thursday**** Monitor readings across the Upstate, Midlands and CSRA on Wednesday afternoon were indicating that very efficient ozone production conditions are currently in place. With the overall weather pattern changing very little for Thursday, that is, with high pressure over the area at the surface and aloft, ground-level ozone production should once again be very efficient with the possibility that a monitor or two in the Upstate, Midlands and CSRA could peak in the code ORANGE category.

There are many things you can do to limit air pollution on ozone action days and throughout the year. To learn more about ozone, and for helpful tips on the things you can do to improve air quality in our community, please visit <http://www.rcgov.us/information/ozone/home.asp>.

For additional information concerning the air quality forecast, please visit the South Carolina Department of Health and Environmental Control air quality forecast website at <http://www.scdhec.net/ozone>.

27. Northeast Richland Traffic and Road Improvement Meeting

On December 6, 2006, Councilwomen Val Hutchinson and Joyce Dickerson held an informational meeting with residents and leaders from the rapidly growing Northeast area of Richland County. The meeting included a presentation by Norm Whitaker, head of the Central Midlands Council of Governments, regarding the transportation priorities and funding mechanisms for roads in the Northeast. Mr. Whitaker explained the correlation between congestion, growth, and air quality in the Northeast, and informed attendees that the ozone monitor located at Sandhill has the potential to draw the entire two-county region into non-compliance. The committee resolved to meet on a quarterly basis in an effort to centralize the often fractured discussion of transportation needs on this rapidly growing area of the county. Councilwomen Dickerson and Hutchinson also received suggestions from the group as to how Council can better plan for transportation needs in the

Northeast, including accelerating an update of the county's comprehensive plan, as well as a comprehensive countywide transportation plan.

28. City of Forest Acres Considering Switching to Biodiesel

In September 2006, Forest Acres city administrator, Mark Williams, informed members of city council that he was interested in using B20 biodiesel as an alternative to diesel in the city's fleet of vehicles. The switch is expected to cost approximately \$13,000 initially, however, this would provide the city with a cleaner, renewable, and domestically produced fuel alternative. The city has eighteen vehicles, including trash loaders and recycling trucks.

If Forest Acres makes the switch, it would join the city of Columbia (which is experimenting with biodiesel in two trucks, with the possibility of expanding that to about 300 diesel vehicles) and the city of Cayce, which is using biodiesel in 30 vehicles without substantial cost or maintenance issues.